

GenCore version 5.1.6
Copyright (C) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: November 4, 2004, 16:42:49 ; Search time 155 seconds
(without alignments)
833.178 Million cell updates/sec

Title: US-10-763-972-2

Perfect score: 1936

Sequence: 1 MSLILLPSRSGSRGAL.....QNKLGHPAGRKRCPLNRS 360

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: Geneseq1980s:*

2: Geneseq1990s:*

3: Geneseq2000s:*

4: Geneseq2001s:*

5: Geneseq2002s:*

6: Geneseq2003as:*

7: Geneseq2003bs:*

8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1936	100.0	360	5	Abb98145 Human GPC
2	1936	100.0	361	7	Adb99264 Human P2Y
3	1798	92.9	333	4	Ag64125 Human G P
4	1542	79.6	295	5	Aau11251 Human P2Y
5	1529	79.0	361	8	Adi16630 Human NOV
6	1519	78.5	361	8	Adn42284 Human nov
7	1189	61.4	338	7	Adc26009 Human pur
8	1189	61.4	338	7	Abw00804 Human GPC
9	1185	61.2	339	5	Abb98145 Human GPC
10	1185	61.2	339	5	Aae18640 Human G-P
11	1185	61.2	339	8	Adc30394 Human GPC
12	1179	60.9	338	7	Adc26000 Human pur
13	942	48.7	271	7	Adc86167 Human GPC
14	921	47.6	170	4	Ag80935 Human ngp
15	921	47.6	170	5	Abg93753 Human G P
16	785	40.5	302	8	Ado30396 Mouse GPC
17	447	23.1	328	5	Adi16984 NOVX prot
18	447	23.1	328	8	Adi16983 NOVX prot
19	447	23.1	328	8	Adp49191 Chick P2Y
20	421	21.7	374	4	Aae04390 Turkey P2
21	421	21.7	374	5	Adi16982 Turkey NO
22	416	21.5	537	5	Aau74538 Human P2Y
23	416	21.5	537	5	Adi16981 Human NOV
24	400	20.7	328	7	Ad45304 Rat Prote
25	395	20.4	328	2	Aar91224 Mouse pan

26	395	20.4	328	7	ADC37339	Adc37339 Nuclear f
27	395	20.4	328	8	ADO29601	Ado29601 Mouse GPC
28	394.5	20.4	377	4	AAE01144	Aae01144 Human pur
29	392.5	20.3	328	2	AAR91225	Aar91225 Human Pla
30	388	20.0	361	5	ADI16985	Adi16985 Rat NOVX
31	388	20.0	361	7	ADH69290	Adh69290 Rat orpha
32	388	20.0	361	8	ADF91782	Adf91782 Rat orpha
33	387.5	20.0	328	4	AAE04393	Aae04393 Human P2-
34	387.5	20.0	328	6	ABP81869	Abp81869 Human pur
35	387.5	20.0	328	7	ADC37341	Adc37341 Nuclear f
36	387.5	20.0	328	7	ADD45306	Add45306 Human Pro
37	387.5	20.0	328	7	ADH38349	Adh38349 Human Pro
38	387.5	20.0	328	7	ADN39970	Adn39970 Cancer/an
39	387.5	20.0	328	8	ADO29600	Ado29600 Human GPC
40	387.5	20.0	328	8	ADP49195	Adp49195 Human P2Y
41	387.5	20.0	377	4	AAE01143	Aae01143 Human pur
42	387.5	20.0	377	4	AAE04392	Aae04392 Human P2-
43	387.5	20.0	377	6	ABP81866	Abp81866 Human pur
44	387.5	20.0	377	7	ADE62766	Ad62766 Human Pro
45	387.5	20.0	377	8	ADO29596	Ado29596 Human GPC

ALIGNMENTS

RESULT 1

ABB98145

ID ABB98145 standard; protein; 360 AA.

XX ABB98145;

XX AC

DT 17-OCT-2002 (first entry)

XX Human GPCR designated PFI-020.

DE Human GPCR designated PFI-020.

XX Human; GPCR; G-protein coupled receptor; antidepressant; neuroleptic;

XX gene therapy; therapeutic; mood; depression; arousal; eating; sleeping;

XX disorder; PFI-020.

XX Homo sapiens.

XX BP1215214-Al.

XX 19-JUN-2002.

XX 04-DEC-2001; 2001EP-00310137.

XX 18-DEC-2000; 2000GB-00030855.

XX 17-JAN-2001; 2001GB-00001222.

XX (PFIZ) PFIZER LTD.

XX (PFIZ) PFIZER INC.

XX Fideck MD;

XX WPI; 2002-510798/55.

XX N-PSDB; ABQ76000.

XX New polynucleotide encoding G protein-coupled receptor PFI-020, useful

XX e.g. for treating eating and sleeping disorders and for identifying

XX specific modulators.

XX Claim 1 (a); Page 11-12; 23pp; English.

XX The invention relates to an isolated polynucleotide encoding a novel

XX polypeptide belonging to the class of proteins known as G-protein coupled

XX receptors (GPCRs). The activity of proteins of the invention may be

XX described as, antidepressant and neuroleptic. Polynucleotides of the

XX invention are used for recombinant expression of the G protein-coupled

XX receptor (PFI-020) polypeptides, to create transgenic animals, as source

XX of primers, probes, antisense sequences and ribozymes and in gene

XX therapy. Therapeutic agents of the invention can be used to treat a wide

XX range of disorders, particularly mood disorders, depression or arousal,

CC especially eating and sleeping disorders. The current sequence represents
 CC a human GPCR designated PFI-020
 XX
 SQ Sequence 360 AA;

Query Match 100.0%; Score 1936; DB 5; Length 360;
 Best Local Similarity 100.0%; Pred. No. 5e-207;
 Matches 360; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLSILLPSRSGSGRRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKQVLSLAYSI 60
 DB 1 MLSILLPSRSGSGRRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKQVLSLAYSI 60
 QY 61 IFILGLPLNGTVLWHSWGQTKRWSGATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120
 DB 61 IFILGLPLNGTVLWHSWGQTKRWSGATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120
 QY 121 LLCKLVHFLFYINLYGSIILLTLCISVHOFGLGVCHPLCSLPYRTRRHAWLGSTTTWALVVL 180
 DB 121 LLCKLVHFLFYINLYGSIILLTLCISVHOFGLGVCHPLCSLPYRTRRHAWLGSTTTWALVVL 180
 QY 181 QLLPTLAFSHTDYINGQMIWYDNTSQENFDRLFAYGIVLTLSGFLSLLGHFGLVFTDQOE 240
 DB 181 QLLPTLAFSHTDYINGQMIWYDNTSQENFDRLFAYGIVLTLSGFLSLLGHFGLVFTDQOE 240
 QY 241 PDQARGEPHEDRQSPSQVHPDPTGVWPLHPLFCALPYHSLLLPHHLLSAFSGLPALDG 300
 DB 241 PDQARGEPHEDRQSPSQVHPDPTGVWPLHPLFCALPYHSLLLPHHLLSAFSGLPALDG 300
 QY 301 SQCGQLDMEASGECEQLPQSPVLSFKGKKNRVLLOKLRQNKLGHPAGKRCPCGLNRS 360
 DB 301 SQCGQLDMEASGECEQLPQSPVLSFKGKKNRVLLOKLRQNKLGHPAGKRCPCGLNRS 360

RESULT 2

ADB99264
 ID ADB99264 standard; protein; 361 AA.

AC ADB99264;

DT 04-DEC-2003 (first entry)

DE Human p2Y2li protein.

KW Gene: human; P2Y2li; chromosome 3; G protein-coupled receptor; GPCR;
 KW Class A rhodopsin-like sub-family; gene therapy; receptor.

XX Homo sapiens.

XX DE10144044-A1.

XX 27-MAR-2003.

XX 07-SEP-2001; 2001DE-01044044.

XX 07-SEP-2001; 2001DE-01044044.

XX (BRUE/) BRUESS M.

XX (BOEN/) BOENISCH H.

XX (VKUE/) VON KUEGELGEN I.

XX Bruess M, Boenisch H, Von Kuegelgen I;

XX WPI; 2003-364675/35.

XX N-PSDB; ADB99267.

XX New human gene P2Y2li and encoded G protein-coupled receptor, useful for
 XX treatment and diagnosis of receptor-associated diseases and for drug
 XX screening.

XX Disclosure; Page 4; 6pp; German.

XX This invention describes the human P2Y2li gene and its 5'- and 3'-

CC untranslated regions, located on chromosome 3 which is a novel G protein-
 CC coupled receptor (GPCR). The protein encoded by P2Y2li is expressed in
 CC blood cells, testis and embryonal kidney cells and contains potential
 CC sites for phosphorylation by protein kinase C and casein kinase II. It is
 CC a member of the Class A rhodopsin-like sub-family of G protein-coupled
 CC receptors and it probably a nucleoside/nucleotide receptor that mediates
 CC action of nucleosides/nucleotides or their sugar derivatives. P2Y2li and
 CC antibodies directed against the encoded protein are useful in diagnosis
 CC and treatment (including gene therapy) of diseases associated with
 CC abnormal levels of P2Y2li expression, in screening assays for modulators,
 CC potential therapeutic agents, and to produce transgenic animals, e.g. for
 CC identifying diseases associated with abnormal expression of P2Y2li. This
 CC sequence represents the human P2Y2li protein described in the disclosure
 CC of the invention.

XX SQ Sequence 361 AA;

Query Match 100.0%; Score 1936; DB 7; Length 361;
 Best Local Similarity 100.0%; Pred. No. 5.1e-207;
 Matches 360; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLSILLPSRSGSGRRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKQVLSLAYSI 60

DB 1 MLSILLPSRSGSGRRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKQVLSLAYSI 60

QY 61 IFILGLPLNGTVLWHSWGQTKRWSGATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120

DB 61 IFILGLPLNGTVLWHSWGQTKRWSGATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120

QY 121 LLCKLVHFLFYINLYGSIILLTLCISVHOFGLGVCHPLCSLPYRTRRHAWLGSTTTWALVVL 180

DB 121 LLCKLVHFLFYINLYGSIILLTLCISVHOFGLGVCHPLCSLPYRTRRHAWLGSTTTWALVVL 180

QY 181 QLLPTLAFSHTDYINGQMIWYDNTSQENFDRLFAYGIVLTLSGFLSLLGHFGLVFTDQOE 240

DB 181 QLLPTLAFSHTDYINGQMIWYDNTSQENFDRLFAYGIVLTLSGFLSLLGHFGLVFTDQOE 240

QY 241 PDQARGEPHEDRQSPSQVHPDPTGVWPLHPLFCALPYHSLLLPHHLLSAFSGLPALDG 300

DB 241 PDQARGEPHEDRQSPSQVHPDPTGVWPLHPLFCALPYHSLLLPHHLLSAFSGLPALDG 300

QY 301 SQCGQLDMEASGECEQLPQSPVLSFKGKKNRVLLOKLRQNKLGHPAGKRCPCGLNRS 360

DB 301 SQCGQLDMEASGECEQLPQSPVLSFKGKKNRVLLOKLRQNKLGHPAGKRCPCGLNRS 360

RESULT 3

ARG64125
 ID ARG64125 standard; protein; 333 AA.

AC ARG64125;

DT 25-SEP-2001 (first entry)

DE Human G protein-coupled receptor GPRV71.

XX Human; guanosine triphosphate binding protein-coupled receptor;
 KW G protein-coupled receptor; GPRV8; GPRV12; GPRV16; GPRV21; GPRV40;
 KW GPRV47; GPRV51; GPRV71; GPRV72; cancer; liver cirrhosis;
 KW Alzheimer's disease; cytostatic; hepatotropic; neurotropic;
 KW neuroprotective; gene therapy; peptide therapy.

XX Homo sapiens.

XX WO200148188-A1.

XX 05-JUL-2001.

XX 28-DEC-2000; 2000WO-JP009408.

XX 28-DEC-1999; 99JP-00375152.

XX 31-MAR-2000; 2000JP-00101339.

PA (HELI-) HELIX RES. INST.
XX Matsumoto S, Oda T, Saito Y, Morikawa N, Yoshida K, Suwa M;
PI Sugiyama T, Kishimoto T, Kanzaki K, Yasuda S, Inoue Y;
XX WPI; 2001-425662/45.
DR N-PSDB; AAH73516.
XX New DNA encoding guanosine triphosphate binding protein coupled receptors
PT and their expression products for screening potential anticancer and
PT nootropic drugs and in diagnosis of these diseases.
XX Example 1; Page 132-135; 170pp; Japanese.
PS
XX The invention relates to nine human guanosine triphosphate binding
CC protein (G protein)-coupled receptors designated GPRV8, GPRV12, GPRV16,
CC GPRV21, GPRV40, GPRV47, GPRV51, GPRV71 and GPRV72, and to the genes
CC encoding them. These genes and proteins and antibodies against the
CC protein are useful in the treatment, prevention, diagnosis and
CC investigation of diseases associated with G protein-coupled receptors,
CC including cancer, cirrhosis of the liver and Alzheimer's disease. The
CC present sequence is a G protein-coupled receptor of the invention
XX
SQ Sequence 333 AA;

Query Match 92.9%; Score 1798; DB 4; Length 333;
Best Local Similarity 99.7%; Pred. No. 1.2e-191;
Matches 331; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 29 MEKVDNMTSQEGLCQFSEKVKQVLSLAYSIIFILGPLNGTVLWHSQGTNRWSCATT 88
Db 1 MEKVDNMTSQEGLCQFSEKVKQVLSLAYSIIFILGPLNGTVLWHSQGTNRWSCATT 60

Qy 89 YLVNLMVADLLVLLPFLIITYSLDDRWPFGBELCKLVHFLFYINLYGSIILLTCTISVHQ 148
Db 61 YLVNLMVADLLVLLPFLIITYSLDDRWPFGBELCKLVHFLFYINLYGSIILLTCTISVHQ 120

Qy 149 FLGVCHPLCSLPYRTRRHWLGTSTTVALVLIQLPLTAFSHTDYINGQMIWYDMTSQEN 208
Db 121 FLGVCHPLCSLPYRTRRHWLGTSTTVALVLIQLPLTAFSHTDYINGQMIWYDMTSQEN 180

Qy 209 FDRLEFAYGIVLTLSGFLSLHGHFGVLTGQEPDQARGEPHEDRQHSQVHPDPTGVW 268
Db 181 FDRLEFAYGIVLTLSGFLSLHGHFGVLTGQEPDQARGEPHEDRQHSQVHPDPTGVW 240

Qy 269 PLHPLFCALPYHSLLLPHHLLSAFSGLPALDGSQCGQLQDMEASGECEQLQPSVLSFKG 328
Db 241 PLHPLFCALPYHSLLLPHHLLSAFSGLPALDGSQCGQLQDMEASGECEQLQPSVLSFKG 300

Qy 329 GKNRVRLLOKLQRLONKLGHPAGRCPCGLNRS 360
Db 301 GKNRVRLLOKLQRLONKLGHPAGRCPCGLNRS 332

RESULT 4
AAU11251
ID AAU11251 standard; protein; 295 AA.
XX
AC AAU11251;
XX
DT 26-FEB-2002 (first entry)
XX
DE Human P2Y-like G protein-coupled receptor.
XX
KW Human; P2Y-like G protein-coupled receptor; GPCR; COPD;
KW chronic obstructive pulmonary disease; nervous system disease;
KW Parkinson's disease; multiple sclerosis; dementia; stroke;
KW Alzheimer's disease; benign prostatic hyperplasia; urinary incontinence;
KW bacterial infection; fungal infection; protozoan infection;
KW viral infection; pain; cancer; anorexia; bulimia; asthma;
KW acute heart failure; hypotension; hypertension; osteoporosis; diabetes;
KW angina pectoris; myocardial infarction; ulcer; inflammation; allergy;
KW psychotic disorder; neurological disorder; anxiety; schizophrenia;
KW

manic depression; delirium; severe mental retardation; dyskinesia.
Homo sapiens.
WO200185764-A2.
15-NOV-2001.
09-MAY-2001; 2001WO-EP005244.
11-MAY-2000; 2000US-0203582P.
21-FEB-2001; 2001US-0269857P.
(FARB) BAYER AG.
Ramakrishnan S;
WPI; 2002-075242/10.
N-PSDB; AAS17746.
New polynucleotides for producing P2Y-like G protein-coupled receptors
(GPCR) that are used for screening inhibitors or regulators of human P2Y-
like GPCR, especially useful for treating pain, cancer or neurological
disorders.
Claim 25; Fig 2; 114pp; English.
The invention relates to an isolated polynucleotide encoding a P2Y-like G
protein-coupled receptor (GPCR) polypeptide, its fragment, derivative or
allele, a host cell containing an expression vector comprising the
polynucleotide and screening for agents that regulate the GPCR activity.
The polynucleotide is useful for producing P2Y-like GPCR polypeptide,
which may be employed for screening agents that inhibit or regulate human
P2Y-like GPCR. The reagent or inhibitor of the human P2Y-like GPCR is
useful for treating or ameliorating P2Y-like GPCR disorders, particularly
COPD (chronic obstructive pulmonary disease), peripheral or central
nervous system disease (e.g. Parkinson's disease, multiple sclerosis,
dementia, stroke, Alzheimer's disease and many other diseases and
disorders listed in the specification), benign prostatic hyperplasia or
urinary incontinence. A pharmaceutical composition containing the
modulators and/or regulators of P2Y-like GPCR is useful for modulating
the activity of a P2Y-like GPCR. In particular, these are useful for
treating, preventing or ameliorating infections (e.g. bacterial, fungal,
protozoan or viral infections), pain, cancer, anorexia, bulimia, asthma,
acute heart failure, hypotension, hypertension, osteoporosis, diabetes,
angina pectoris, myocardial infarction, ulcers, inflammation, allergies,
psychotic or neurological disorders (e.g. anxiety, schizophrenia, manic
depression, delirium, severe mental retardation or dyskinesias). The
present sequence is the P2Y-like GPCR of the invention
SQ Sequence 295 AA;

Query Match 79.6%; Score 1542; DB 5; Length 295;
Best Local Similarity 98.6%; Pred. No. 4e-163;
Matches 284; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 29 MEKVDNMTSQEGLCQFSEKVKQVLSLAYSIIFILGPLNGTVLWHSQGTNRWSCATT 88
Db 1 MEKVDNMTSQEGLCQFSEKVKQVLSLAYSIIFILGPLNGTVLWHSQGTNRWSCATT 60

Qy 89 YLVNLMVADLLVLLPFLIITYSLDDRWPFGBELCKLVHFLFYINLYGSIILLTCTISVHQ 148
Db 61 YLVNLMVADLLVLLPFLIITYSLDDRWPFGBELCKLVHFLFYINLYGSIILLTCTISVHQ 120

Qy 149 FLGVCHPLCSLPYRTRRHWLGTSTTVALVLIQLPLTAFSHTDYINGQMIWYDMTSQEN 208
Db 121 FLGVCHPLCSLPYRTRRHWLGTSTTVALVLIQLPLTAFSHTDYINGQMIWYDMTSQEN 180

Qy 209 FDRLEFAYGIVLTLSGFLSLHGHFGVLTGQEPDQARGEPHEDRQHSQVHPDPTGVW 268
Db 181 FDRLEFAYGIVLTLSGFLSLHGHFGVLTGQEPDQARGEPHEDRQHSQVHPDPTGVW 240

Qy 269 PLHPLFCALPYHSLLLPHHLLSAFSGLPALDGSQCGQLQDMEASGECEQLQPSVLSFKG 316

Db 241 PLHPLECALFYHSLLLPHLLSAFSGLPALDGSQCGLQDMEASVRAMQ 288
RESULT 5
AD116630
ID AD116630 standard; protein; 361 AA.
XX AC AD116630;
XX DT 15-APR-2004 (first entry)
XX DE Human NOVX protein to treat human pathological conditions SeqID166.
XX KW human; NOVX; cardiomyopathy; atherosclerosis; cancer; diabetes;
KW inflammation; autoimmune disorder; allergy; blood disorder;
KW acquired immunodeficiency syndrome; AIDS; obesity; asthma;
KW immunoglobulin (IgA nephropathy; cirrhosis; arthritis;
KW Alzheimer's disease; infection; stroke; muscular dystrophy; epilepsy;
KW cytostatic; cardiant; antiinflammatory; immunosuppressive; antiallergic;
KW haemostatic; anti-HIV; antidiabetic; antiarteriosclerotic; anorectic;
KW antiasthmatic; nephrotropic; antiarthritic; hepatotropic;
KW neuroprotective; nootropic; antibacterial; virucide; antiparasitic;
KW relaxant; anticonvulsant; neurogenesis; wound healing; angiogenesis;
KW chromosome mapping; tissue typing; pharmacogenomic; SNP;
KW single nucleotide polymorphism.
XX OS Homo sapiens.
XX PN WO200268649-A2.
XX PD 06-SEP-2002.
XX PF 31-JAN-2002; 2002WO-US002785.
XX PR 31-JAN-2001; 2001US-0265395P.
PR 31-JAN-2001; 2001US-0265412P.
PR 31-JAN-2001; 2001US-0265514P.
PR 31-JAN-2001; 2001US-0265517P.
PR 02-FEB-2001; 2001US-0266406P.
PR 05-FEB-2001; 2001US-0266767P.
PR 07-FEB-2001; 2001US-0266975P.
PR 07-FEB-2001; 2001US-0267057P.
PR 08-FEB-2001; 2001US-0267459P.
PR 09-FEB-2001; 2001US-0267823P.
PR 15-FEB-2001; 2001US-0268974P.
PR 26-FEB-2001; 2001US-0271664P.
PR 27-FEB-2001; 2001US-0271839P.
PR 27-FEB-2001; 2001US-0271853P.
PR 02-MAR-2001; 2001US-0272788P.
PR 02-MAR-2001; 2001US-0273046P.
PR 14-MAR-2001; 2001US-0275925P.
PR 14-MAR-2001; 2001US-0275947P.
PR 14-MAR-2001; 2001US-0275950P.
PR 14-MAR-2001; 2001US-0275983P.
PR 15-MAR-2001; 2001US-0276448P.
PR 15-MAR-2001; 2001US-0276450P.
PR 16-MAR-2001; 2001US-0276397P.
PR 16-MAR-2001; 2001US-0276768P.
PR 20-MAR-2001; 2001US-0278652P.
PR 26-MAR-2001; 2001US-0278775P.
PR 26-MAR-2001; 2001US-0278778P.
PR 29-MAR-2001; 2001US-0278882P.
PR 29-MAR-2001; 2001US-0279884P.
PR 30-MAR-2001; 2001US-0280147P.
PR 11-APR-2001; 2001US-0282392P.
PR 11-APR-2001; 2001US-0283083P.
PR 20-APR-2001; 2001US-0285133P.
PR 23-APR-2001; 2001US-0285749P.
PR 03-MAY-2001; 2001US-0288327P.
PR 03-MAY-2001; 2001US-0288504P.
PR 29-MAY-2001; 2001US-0294047P.
PR 30-MAY-2001; 2001US-0294473P.

08-JUN-2001; 2001US-0296964P.
PR 18-JUN-2001; 2001US-0298959P.
PR 19-JUN-2001; 2001US-0299324P.
PR 13-AUG-2001; 2001US-0312020P.
PR 16-AUG-2001; 2001US-0312889P.
PR 16-AUG-2001; 2001US-0312908P.
PR 21-AUG-2001; 2001US-0313390P.
PR 28-AUG-2001; 2001US-0315470P.
PR 31-AUG-2001; 2001US-0316447P.
PR 07-SEP-2001; 2001US-0318115P.
PR 07-SEP-2001; 2001US-0318118P.
PR 12-SEP-2001; 2001US-0318740P.
PR 19-SEP-2001; 2001US-0323379P.
PR 18-OCT-2001; 2001US-0330245P.
PR 18-OCT-2001; 2001US-0330308P.
PR 14-NOV-2001; 2001US-0332701P.
XX (CURA-) CURAGEN CORP.
XX Tchernev VT, Spytek KA, Zerhusen BD, Patturajan M, Shimkets RA;
XX Li L, Gangolli EA, Padigaru M, Anderson DW, Rastelli L, Miller CE;
XX Gerlach VL, Taupier RJ, Gusev VY, Colman SD, Wolenc AR, Pena CE;
XX Furtak K, Grosse WM, Alsobrook JP, Lepley DM, Rieger DK, Burgess CE;
XX WPI; 2002-706998/76.
XX N-PSDB; AD116629.
XX PR New NOVX polypeptides and nucleic acids, useful for preventing or
XX treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
XX atherosclerosis, or diabetes, and in chromosome mapping, tissue typing or
XX pharmacogenomics.
XX Claim 1; SEQ ID NO 166; 1498pp; English.
XX This invention relates to a novel nucleic acids, and encoded polypeptides
XX thereof, which have properties related to the stimulation of biochemical
XX or physiological responses in a cell, tissue, organ or organism.
XX Specifically, it refers to the use of biologically active fragments for
XX diagnostic and prognostic assays and furthermore in the treatment of
XX diverse pathological conditions. The present invention describes novel
XX human and murine NOVX proteins, as well as methods to modulate their
XX expression using antisense oligos, ribozymes and peptide nucleic acids.
XX The NOVX polypeptides, polynucleotides and antibodies are useful in
XX treating or preventing NOVX-associated disorders, e.g. cardiomyopathy,
XX atherosclerosis, cancer and diabetes. Furthermore, they may be used in
XX treating or preventing diseases such as inflammation, autoimmune
XX disorders, allergies, blood disorders, acquired immunodeficiency syndrome
XX (AIDS), obesity, asthma, immunoglobulin (IgA) nephropathy, cirrhosis,
XX arthritis, Alzheimer's disease, infections, stroke, muscular dystrophy
XX and epilepsy. Accordingly, these molecules have many activities including
XX cytostatic, cardiant, antiinflammatory, immunosuppressive, antiallergic,
XX haemostatic, anti-HIV, antidiabetic, antiarteriosclerotic, anorectic,
XX antiasthmatic, nephrotropic, antiarthritic, hepatotropic,
XX neuroprotective, nootropic, antibacterial, virucide, antiparasitic,
XX relaxant and anticonvulsant. In addition, they are useful in screening
XX assays to identify small molecules that modulate or inhibit, for example,
XX neurogenesis, wound healing and angiogenesis. The nucleic acids are also
XX used as in chromosome mapping, tissue typing, preventive medicine and
XX pharmacogenomics. This polypeptide is a human NOVX protein of the
XX invention.
XX Sequence 361 AA;

Query Match 79.0%; Score 1529; DB 5; Length 361;
Best Local Similarity 82.6%; Pred. No. 1.5e-161;
Matches 303; Conservative 11; Mismatches 39; Indels 14; Gaps 5;
Qy 1 MSLILLPSRSGSRGALLLEGASRDMEKVDYMTSQGLCQFSKQYVLSIAYSI 60
Db 1 MSLILLPSRSGSRGALLLEGASRDMEKVDYMTSQGLCQFSKQYVLSIAYSI 60
Qy 61 IFILGLPLNGTVLWHISWGQTKWSVCATYLVNLMVADLLYVLLPFIITYLDDRPFG 120

Db	61	IFIILGLPLNGTVLWHSMGQTKRMSCATTYLVNLMVADLLVLLPFLIITYSLDDRWPFGE	120
Qy	121	LLCKLVHFLFYINLYGSIILLTCISVHOFVGVCHPLCSLPYRTRHAWLGTSTTVALVL	180
Db	121	LLCKLVHFLFYINLYGSIILLTCISVHOFVGVCHPLCSLPYRTRHAWLGTSTTVALVL	180
Qy	181	QLLPTLAFSTHDYINGMIWDMTQENFDRLFAYGIVLTLTGSLFLSLGHLGFLTDGQE	240
Db	181	QLLPTLAFSTHDYINGMIWDMTQENFDRLFAYGIVLTLTGSLFLSLGHLGFLTDGQE	236
Qy	241	PDQARG--EPHEDRQHSQVHPDPTGWPLHPLF--CALPVHSLLLPHHLLSAF---S	293
Db	237	--WYRSIIKPEENLMRTGNTARASITILLVCGLFTLCFVPPH-ITRSFYLICFLLSQ	293
Qy	294	GLPALDGSQCQLDMEASGECEQLPQPSVPLSPFKGKNRRLVLLQKLRQNKLGHPAGRKR	353
Db	294	DCQLLMAAQCQLDMEASGECEQLPQPSVPLSPFKGKNRRLVLLQKLRQNKLGHPAGRKR	353
Qy	354	CPGLNRS 360	
Db	354	CPGLNRS 360	
RESULT 6			
ADN42284			
ID	ADN42284 standard; protein; 361 AA.		
XX	ADN42284;		
XX	17-JUN-2004 (first entry)		
XX	Human novel protein NOV 43.		
XX	Human; NOVX; cancer; diabetes; cardiomyopathy; atherosclerosis; SNP;		
KW	single nucleotide polymorphism.		
XX	Homo sapiens.		
XX	Key Location/Qualifiers		
PH	Misc-difference 162		
FT	/note= "May be Pro as the result of a single nucleotide		
FT	polymorphism"		
XX	US2004033493-A1.		
PD	19-FEB-2004.		
XX	31-JAN-2002; 2002US-00072012.		
PR	31-JAN-2001; 2001US-0265395P.		
PR	31-JAN-2001; 2001US-0265412P.		
PR	31-JAN-2001; 2001US-0265514P.		
PR	31-JAN-2001; 2001US-0265517P.		
PR	02-FEB-2001; 2001US-0266408P.		
PR	05-FEB-2001; 2001US-0266767P.		
PR	07-FEB-2001; 2001US-0266975P.		
PR	08-FEB-2001; 2001US-0267057P.		
PR	08-FEB-2001; 2001US-0267459P.		
PR	09-FEB-2001; 2001US-0267823P.		
PR	15-FEB-2001; 2001US-0268974P.		
PR	26-FEB-2001; 2001US-0271664P.		
PR	27-FEB-2001; 2001US-0271839P.		
PR	27-FEB-2001; 2001US-0271855P.		
PR	02-MAR-2001; 2001US-0272789P.		
PR	02-MAR-2001; 2001US-0273046P.		
PR	14-MAR-2001; 2001US-0275925P.		
PR	14-MAR-2001; 2001US-0275947P.		
PR	14-MAR-2001; 2001US-0275950P.		
PR	14-MAR-2001; 2001US-0275989P.		
PR	15-MAR-2001; 2001US-0276448P.		
PR	15-MAR-2001; 2001US-0276450P.		
PR	16-MAR-2001; 2001US-0276450P.		
PR	16-MAR-2001; 2001US-0276397P.		
PR	16-MAR-2001; 2001US-0276769P.		

PR	20-MAR-2001; 2001US-0278652P.	
PR	26-MAR-2001; 2001US-0278775P.	
PR	26-MAR-2001; 2001US-0278778P.	
PR	29-MAR-2001; 2001US-0279882P.	
PR	29-MAR-2001; 2001US-0279884P.	
PR	30-MAR-2001; 2001US-0280147P.	
PR	11-APR-2001; 2001US-0282992P.	
PR	11-APR-2001; 2001US-0283083P.	
PR	20-APR-2001; 2001US-0285133P.	
PR	23-APR-2001; 2001US-0285749P.	
PR	03-MAY-2001; 2001US-0288327P.	
PR	03-MAY-2001; 2001US-0288504P.	
PR	29-MAY-2001; 2001US-0294047P.	
PR	30-MAY-2001; 2001US-0294473P.	
PR	08-JUN-2001; 2001US-0296964P.	
PR	18-JUN-2001; 2001US-0298959P.	
PR	19-JUN-2001; 2001US-0299324P.	
PR	13-AUG-2001; 2001US-0312020P.	
PR	16-AUG-2001; 2001US-0312889P.	
PR	16-AUG-2001; 2001US-0312908P.	
PR	21-AUG-2001; 2001US-0313930P.	
PR	28-AUG-2001; 2001US-0315470P.	
PR	31-AUG-2001; 2001US-0316447P.	
PR	07-SEP-2001; 2001US-0318115P.	
PR	07-SEP-2001; 2001US-0318118P.	
PR	12-SEP-2001; 2001US-0318740P.	
PR	19-SEP-2001; 2001US-0323279P.	
PR	18-OCT-2001; 2001US-0330245P.	
PR	18-OCT-2001; 2001US-0330308P.	
PR	14-NOV-2001; 2001US-0332701P.	
XX	(TCHE/) TCHERNEV V T.	
PA	(SPYT/) SPYTEK K A.	
PA	(ZERH/) ZERHUSEN B D.	
PA	(PATT/) PATTURAJAN M.	
PA	(SHIM/) SHIMKETS R A.	
PA	(LILL/) LI L.	
PA	(GANG/) GANGOLLI E A.	
PA	(PADI/) PADIGARU M.	
PA	(ANDE/) ANDERSON D W.	
PA	(RAST/) RASTELLI L.	
PA	(MILL/) MILLER C E.	
PA	(GERL/) GERLACH V.	
PA	(TAUP/) TAUPIER R J.	
PA	(GUSE/) GUSEV V Y.	
PA	(COLM/) COLMAN S D.	
PA	(WOLE/) WOLENC A R.	
PA	(PENA/) PENNA C E A.	
PA	(FURT/) FURTAK K.	
PA	(GROS/) GROSSE W M.	
PA	(ALSO/) ALSOBROOK J P.	
PA	(LEPL/) LEPLEY D M.	
PA	(RIEG/) RIEGER D K.	
PA	(BURG/) BURGESS C E.	
XX		
PI	Tchernev VT, Spytek KA, Zerhusen BD, Patturajan M, Shimkets RA; Li L, Gangolli EA, Padigar M, Anderson DW, Rastelli L, Miller CE; Gerlach V, Taupier RJ, Gusev VY, Colman SD, Wolenc AR, Pena CEA; Furtak K, Grosse WM, Alsobrook JP, Lepley DM, Rieger DK, Burgess CE; WPI; 2004-180039/17.	
DR	N-PSDB; ADN42283.	
XX		
PT	Isolated NOVX polypeptides and polynucleotides, useful for preventing diagnosing and/or treating cancer, diabetes, cardiomyopathy and atherosclerosis.	
PT	Claim 1; SEQ ID NO 166; 1309pp; English.	
XX		
CC	The invention relates isolated 162 NOVX polypeptides (NOV1-NOV99, including splice variants) and the nucleic acids (NA) that encode them. Also included are the mature NOVX proteins (and their encoding polynucleotides), a vector comprising NOVX NA, a cell comprising the	

CC vector, an antibody that binds immunospecifically to NOVX, determining
 CC the presence or amount of NOVX in a sample, determining the presence or
 CC amount of NOVX NA in a sample, identifying an agent that binds to NOVX,
 CC modulating the activity of NOVX, treating or preventing a NOVX-associated
 CC disorder, determining the presence of or predisposition to a disease
 CC associated with altered levels of NOVX and treating a pathological state
 CC in a mammal comprising administering a polypeptide which is at least 95%
 CC identical to NOVX (or fragment). NOVX and NA may be used in the
 CC prevention, treatment and diagnosis of diseases associated with
 CC inappropriate expression and activity of NOVX (e.g. cancer, diabetes,
 CC cardiomyopathy and/or atherosclerosis). The anti-NOVX antibodies and
 CC antagonists may also be used to down regulate expression and activity of
 CC NOVX. The anti-NOVX antibodies may also be used as diagnostic agents for
 CC detecting the presence of NOVX in samples (e.g. by enzyme linked
 CC immunosorbent assay (ELISA). The agents and methods may be used in this
 CC way to prevent, diagnose and treat cancer, diabetes, cardiomyopathy
 CC and/or atherosclerosis. The present sequence represents a NOVX protein.
 CC
 XX Sequence 361 AA;

Query Match 78.5%; Score 1519; DB 8; Length 361;
 Best Local Similarity 82.3%; Pred. No. 2e-150;
 Matches 302; Conservative 11; Mismatches 40; Indels 14; Gaps 5;

QY 1 MLSILLPSRSGSRGSRGALLLEGASRDMEKVDMTSQBGLCQFSEKYKQVYLSLAYSI 60
 DB 1 MLSILLPSRSGSRGSRGALLLEGASRDMEKVDMTSQBGLCQFSEKYKQVYLSLAYSI 60

QY 61 IFILGPLNGTGLVHWSGQTKWSCATTVLNLMVADLLVLLPFLIITYSLDDRPFG 120
 DB 61 IFILGPLNGTGLVHWSGQTKWSCATTVLNLMVADLLVLLPFLIITYSLDDRPFG 120

QY 121 LKCLVHFLFYINLYGSILLTCTISVHQFLGCHPLCSLPYRTRHAWLGTSTTVALVYL 180
 DB 121 LKCLVHFLFYINLYGSILLTCTISVHQFLGCHPLCSLPYRTRHAWLGTSTTVALVYL 180

QY 181 QLLPTLAFSHDTYINGQMIWYDMSQENFDRFPAYGIVLTLSGFLSLGHGVLFTDQ 240
 DB 181 QLLPTLAFSHDTYINGQMIWYDMSQENFDRFPAYGIVLTLSGFLSLGHGVLFTDQ 240

QY 241 PQARG--EPHEDRQHSQVHPDPTGVWPLHPLF--CALPYHSLLLPHLLSAF---S 293
 DB 237 --WVRLKPEENLWRTGNTAARSRTITLLVCGIFTLCFVFPF-ITRSFYLTICFLSQ 293

QY 294 GLPALDSCGGLQDMASCECQLPQSPVLFGKGGKRVRLQLKRNKLGEHPAGRKR 353
 DB 294 DCQLLMAACGLQDMASCECQLPQSPVLFGKGGKRVRLQLKRNKLGEHPAGRKR 353

QY 354 CPGLNRS 360
 DB 354 CPGLNRS 360

RESULT 7
 ADC26009
 ID ADC26009 standard; protein; 338 AA.

XX
 AC ADC26009;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human purinergic receptor P2Y₂-related GPCRx6 alternative protein.
 XX
 KW virucide; fungicide; antibacterial; cytostatic; analgesic; antidiabetic;
 KW anorectic; cardiac; hypotensive; osteopathic; anti-anginal;
 KW anti-atherosclerotic; cerebroprotective; anti-ulcer; anti-allergic;
 KW nootropic; neuroprotective; anti-parkinsonian; G-protein coupled receptor;
 KW GPCR; viral; fungal; bacterial infection; immune-related disorder;
 KW cancer; pain; diabetes; obesity; anorexia; acute heart failure;
 KW hypertension; osteoporosis; angina pectoris; atherosclerosis; stroke;
 KW ulcer; allergy; psychotic neurological disorder; schizophrenia; dementia;
 KW degenerative disease; Parkinson's; Alzheimer's; dyskinesia; Huntington's;
 KW human; GPCRx6; purinergic receptor P2Y₂.

XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH Misc-difference 270
 FT - /note= "Encoded by TTC"

XX US2003088080-A1.
 XX
 PD 08-MAY-2003.
 XX
 XX 21-JUN-2001; 2001US-00885453.
 XX
 XX 20-JUN-2000; 2000US-0212908P.
 XX
 XX 05-DEC-2000; 2000EP-00870289.
 XX
 XX (COMM/) COMMUNI D.
 XX (LANN/) LANNON V.
 XX (GOVA/) GOVAERTS C.
 XX (PARM/) PARMENTIER M.
 XX (DETH/) DETHUX M.
 XX
 XX Communi D, Lannoy V, Govaerts C, Parmentier M, Dethux M;
 XX
 XX WPI; 2003-657983/62.
 XX N-PSDB; ADC25999.
 XX
 XX New human G-protein coupled receptor, useful for treating receptor-
 XX mediated disorders, e.g. infections, cancer, pain, diabetes, obesity,
 XX acute heart failure, osteoporosis, stroke, ulcer, allergy, or
 XX neurological disorders.

XX Example 3; Page 15; 24pp; English.

XX The invention relates to a novel G-protein coupled receptor (GPCR). The
 XX receptor, polynucleotide, agonist, reverse agonist and antagonist of the
 XX invention may be useful for treating receptor-mediated disorders
 XX including viral, fungal or bacterial infections, immune-related disorders
 XX such as cancer, pain, diabetes, obesity, anorexia, acute heart failure,
 XX hyperension, osteoporosis, angina pectoris, atherosclerosis, stroke,
 XX ulcer and allergy, as well as psychotic and neurological disorders such
 XX as schizophrenia and dementia, degenerative diseases such as Parkinson's
 XX disease and Alzheimer's disease and dyskinesias such as Huntington's
 XX disease. The current sequence is that of the human purinergic receptor
 XX P2Y₂-related GPCRx6 alternative protein of the invention.

XX Sequence 338 AA;

Query Match 61.4%; Score 1189; DB 7; Length 338;
 Best Local Similarity 98.7%; Pred. No. 1.3e-123;
 Matches 225; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MLSILLPSRSGSRGSRGALLLEGASRDMEKVDMTSQBGLCQFSEKYKQVYLSLAYSI 60
 DB 1 MLSILLPSRSGSRGSRGALLLEGASRDMEKVDMTSQBGLCQFSEKYKQVYLSLAYSI 60

QY 61 IFILGPLNGTGLVHWSGQTKWSCATTVLNLMVADLLVLLPFLIITYSLDDRPFG 120
 DB 61 IFILGPLNGTGLVHWSGQTKWSCATTVLNLMVADLLVLLPFLIITYSLDDRPFG 120

QY 121 LKCLVHFLFYINLYGSILLTCTISVHQFLGCHPLCSLPYRTRHAWLGTSTTVALVYL 180
 DB 121 LKCLVHFLFYINLYGSILLTCTISVHQFLGCHPLCSLPYRTRHAWLGTSTTVALVYL 180

QY 181 QLLPTLAFSHDTYINGQMIWYDMSQENFDRFPAYGIVLTLSGFLSL 228
 DB 181 QLLPTLAFSHDTYINGQMIWYDMSQENFDRFPAYGIVLTLSGFLSP 228

RESULT 8
 ABW00804
 ID ABW00804 standard; protein; 338 AA.
 XX

AC ABW0804;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Human GPCRx6 protein.
 XX
 XX Human; G-protein coupled receptor; GPCR; infection; neoplastic process;
 KW inflammation; myocardial infarction; atherosclerosis; angina pectoris;
 KW hypertension; osteoporosis; antibacterial; cytostatic; fungicide; pain;
 KW diabetes; cancer; virucide; analgesic; cardiant.
 XX
 OS Homo sapiens.
 XX
 FN US2003108986-A1.
 XX
 PD 12-JUN-2003.
 XX
 FF 20-FEB-2002; 2002US-00079384.
 XX
 PR 21-JUN-2001; 2001US-00885453.
 XX
 PA (EURO-) EUROSCREEN SA.
 XX
 PI Communi D, Lannoy V, Brezillon S, Dethoux M, Parmentier M;
 FI Govaerts C;
 DR WPI; 2003-810852/76.
 DR N-PSDB; AAD61648.
 XX
 PT Novel G-protein coupled receptor useful for treating viral infections,
 PT bacterial infections, fungal infections, cancer, diabetes, hypertension,
 PT osteoporosis, angina pectoris, myocardial infarction, atherosclerosis.
 XX
 PS Claim 1; Fig 4; Opp; English.
 CC The present invention relates to novel G-protein coupled receptors
 CC (GPCRs) and the nucleic acids encoding them. The invention is useful for
 CC treating viral, bacterial and fungal infections, inflammatory and
 CC neoplastic processes, pain, diabetes, hypertension, osteoporosis, cancer,
 CC angina pectoris, myocardial infarction and atherosclerosis. The present
 CC sequence is human G-protein coupled receptor (GPCR) protein
 XX
 SQ Sequence 338 AA;
 Query Match 61.4%; Score 1189; DB 7; Length 338;
 Best Local Similarity 98.7%; Pred. No. 1.3e-123;
 Matches 225; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSLILLPSRSGSRGSRGALLLEGASRDMEKVDNMTSQEQLCQFSEKQKVYLSLAYSI 60
 DB 1 MSLILLPSRSGSRGSRGALLLEGASRDMEKVDNMTSQEQLCQFSEKQKVYLSLAYSI 60
 QY 61 IFILGLPLNGTVLHWSGQTRKWSCATTYLVNLMVADLLYVLLPFLIITYSLDRWPFG 120
 DB 61 IFILGLPLNGTVLHWSGQTRKWSCATTYLVNLMVADLLYVLLPFLIITYSLDRWPFG 120
 QY 121 LLCKLVHFLFYINLYGSILLTCTSVHQLGVCPLCSLPYRTRRHAWLGTSTTVALVVL 180
 DB 121 LLCKLVHFLFYINLYGSILLTCTSVHQLGVCPLCSLPYRTRRHAWLGTSTTVALVVL 180
 QY 181 QLLPTLAFSHTDYINGQMIWYDMTQENFDRLFAYGIVLTLSGLSLL 228
 DB 181 QLLPTLAFSHTDYINGQMIWYDMTQENFDRLFAYGIVLTLSGLSLL 228
 RESULT 9
 ABB98146
 ID ABB98146 standard; protein; 339 AA.
 XX
 AC ABB98146;
 XX
 DT 17-OCT-2002 (first entry)
 XX

DE Human GPCR designated PFI-020'.
 XX
 KW Human; GPCR; G-protein coupled receptor; antidepressant; neuroleptic;
 KW gene therapy; therapeutic; mood; depression; arousal; eating; sleeping;
 KW disorder; PFI-020'.
 XX
 OS Homo sapiens.
 XX
 PN EP1215214-A1.
 XX
 PD 19-JUN-2002.
 XX
 FF 04-DEC-2001; 2001EP-00310137.
 XX
 PR 18-DEC-2000; 2000GB-00030855.
 PR 17-JAN-2001; 2001GB-00001222.
 XX
 PA (PFI2) PFIZER LTD.
 PA (PFI2) PFIZER INC.
 XX
 PI Fidock MD;
 XX
 DR WPI; 2002-510798/55.
 DR N-PSDB; ABQ79300.
 XX
 PT New polynucleotide encoding G protein-coupled receptor PFI-020, useful
 PT e.g. for treating eating and sleeping disorders and for identifying
 PT specific modulators.
 XX
 PS Claim 1 (b); Page 13; 23pp; English.
 CC The invention relates to an isolated polynucleotide encoding a novel
 CC polypeptide belonging to the class of proteins known as G-protein coupled
 CC receptors (GPCRs). The activity of proteins of the invention may be
 CC described as, antidepressant and neuroleptic. Polynucleotides of the
 CC invention are used for recombinant expression of the G protein-coupled
 CC receptor (PFI-020) polypeptides, to create transgenic animals, as source
 CC of primers, probes, antisense sequences and ribozymes and in gene
 CC therapy. Therapeutic agents of the invention can be used to treat a wide
 CC range of disorders, particularly mood disorders, depression or arousal,
 CC especially eating and sleeping disorders. The current sequence represents
 CC a human GPCR designated PFI-020'.
 XX
 SQ Sequence 339 AA;
 Query Match 61.2%; Score 1185; DB 5; Length 339;
 Best Local Similarity 99.6%; Pred. No. 3.7e-123;
 Matches 225; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MSLILLPSRSGSRGSRGALLLEGASRDMEKVDNMTSQEQLCQFSEKQKVYLSLAYSI 60
 DB 1 MSLILLPSRSGSRGSRGALLLEGASRDMEKVDNMTSQEQLCQFSEKQKVYLSLAYSI 60
 QY 61 IFILGLPLNGTVLHWSGQTRKWSCATTYLVNLMVADLLYVLLPFLIITYSLDRWPFG 120
 DB 61 IFILGLPLNGTVLHWSGQTRKWSCATTYLVNLMVADLLYVLLPFLIITYSLDRWPFG 120
 QY 121 LLCKLVHFLFYINLYGSILLTCTSVHQLGVCPLCSLPYRTRRHAWLGTSTTVALVVL 180
 DB 121 LLCKLVHFLFYINLYGSILLTCTSVHQLGVCPLCSLPYRTRRHAWLGTSTTVALVVL 180
 QY 181 QLLPTLAFSHTDYINGQMIWYDMTQENFDRLFAYGIVLTLSGLSLL 226
 DB 181 QLLPTLAFSHTDYINGQMIWYDMTQENFDRLFAYGIVLTLSGLSLL 226
 RESULT 10
 AAE18640
 ID AAE18640 standard; protein; 339 AA.
 XX
 AC AAE18640;
 XX
 DT 17-MAY-2002 (first entry)
 XX

XX DE Human G-protein coupled receptor (GCREC-1).

XX KW Human; G-protein coupled receptor; GCREC-1; cell proliferative disorder;

XX KW neurological; cardiovascular; gastrointestinal; autoimmune; inflammatory;

XX KW metabolic; hepatitis; psoriasis; cancer; epilepsy; Alzheimer's disease;

XX KW Pick's disease; Huntington's disease; Parkinson's disease; hypertension;

XX KW atherosclerosis; myocardial infarction; gastritis; cirrhosis; cytostatic;

XX KW osteoporosis; Crohn's disease; acquired immunodeficiency syndrome; AIDS;

XX KW anaemia; asthma; rheumatoid arthritis; diabetes; obesity; drug screening;

XX KW transgenic animal; allergy; gene therapy; hepatotropic; anticonvulsant;

XX KW neurotropic; neuroprotective; cardiant; immunosuppressive; anorectic;

XX KW virucide; receptor.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers

XX FT Domain 89..109

XX FT /note= "Transmembrane domain"

XX FT Domain 130..149

XX FT /note= "Transmembrane domain"

XX PN WO200210387-A2.

XX XX

XX PD 07-FEB-2002.

XX XX

XX PF 25-JUL-2001; 2001WO-US023433.

XX XX

XX PR 27-JUL-2000; 2000US-0221478P.

XX PR 03-AUG-2000; 2000US-0233268P.

XX PR 21-AUG-2000; 2000US-0227054P.

XX PR 08-SEP-2000; 2000US-0231121P.

XX PR 13-SEP-2000; 2000US-0232243P.

XX PR 15-SEP-2000; 2000US-0232691P.

XX PR 22-SEP-2000; 2000US-0235146P.

XX XX

XX PA (INCY-) INCYTE GENOMICS INC.

XX XX

XX PI Thornton M, Patterson C, Lal P, Burford N, Yue H, Gandhi AR;

XX PI Elliot VS, Rammakar J, Baughn MR, Kallick DA, Wallia NK, Hafalia AJA;

XX PI Yao MG, Lu Y, Tribouley CW, Policky JL, Kearney L, Graul RC;

XX PI Warren BA, Lee EA, Ding L;

XX XX

XX DR WPI; 2002-188744/24.

XX DR N-PSDB; AAD29667.

XX XX

XX PT New human G-protein coupled receptor polypeptide for diagnosis,

XX PT prevention and treatment of cell proliferative, neurological,

XX PT cardiovascular, gastrointestinal, autoimmune/inflammatory, and metabolic

XX PT disorders.

XX XX

XX PS Claim 1; Page 114-115; 150pp; English.

XX XX

XX CC The invention relates to novel human G-protein coupled receptors (GCREC)

XX CC and their encoding polynucleotides. GCREC is useful as an immunogen for

XX CC preparing monoclonal and polyclonal antibodies. GCREC is useful for

XX CC diagnosing, treating and preventing a cell proliferative disorder (e.g.,

XX CC hepatitis, psoriasis, cancer), a neurological disorder (e.g., epilepsy,

XX CC Alzheimer's disease, Pick's disease, Huntington's disease, Parkinson's

XX CC disease), a cardiovascular disorder (e.g., atherosclerosis, hypertension,

XX CC myocardial infarction), gastrointestinal disorder (e.g., gastritis,

XX CC cirrhosis, Crohn's disease), an autoimmune/inflammatory disorder (e.g.,

XX CC acquired immunodeficiency syndrome (AIDS), allergy, anaemia, asthma,

XX CC rheumatoid arthritis), a metabolic disorder (e.g., diabetes, obesity,

XX CC osteoporosis), and viral infections. GCREC is useful in a number of drug

XX CC screening techniques, and to analyse the proteome of a tissue or cell

XX CC type. GCREC is useful for creating knockin humanised animals or

XX CC transgenic animals to model human diseases, in somatic or germline gene

XX CC therapy, to generate a transcript image of a tissue or cell type, for

XX CC detecting differences in the chromosomal location due to translocation,

XX CC inversion, etc., among normal, carrier or affected individuals, and as

XX CC hybridization probes for mapping naturally occurring genomic sequences.

XX CC GCREC is useful in Southern or northern analysis, dot blot or other

CC membrane-based technologies, in PCR technologies, in dipstick, pin,

CC multiformat enzyme linked immunosorbant (ELISA)-like assays, and in

CC microarrays utilising fluids or tissues from patients to detect altered

CC GCREC expression. The present sequence is human GCREC-1

XX SQ Sequence 339 AA;

XX Query Match 61.2%; Score 1185; DB 5; Length 339;

XX Best Local Similarity 99.8%; Pred. No. 3.7e-123;

XX Matches 225; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MLSILPSSRSGSRGALLLEGASRDMEKVDMTSQEGLQCFSEKYKQVYLSAYSI 60

Db 1 MLSILPSSRSGSRGALLLEGASRDMEKVDMTSQEGLQCFSEKYKQVYLSAYSI 60

Qy 61 IFILGLPLNGTIVLHWSGQTKRSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGE 120

Db 61 IFILGLPLNGTIVLHWSGQTKRSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGE 120

Qy 121 LLCKLVHFLFYINLYGSILLTCTISVHQFLGVCHPLCSLPYRTRRHAWLGTSTTVALVVL 180

Db 121 LLCKLVHFLFYINLYGSILLTCTISVHQFLGVCHPLCSLPYRTRRHAWLGTSTTVALVVL 180

Qy 181 QLLPTLAFSHTDYINGQMIWYDMSQENFDRLPFAYGIVLTLSQFLS 226

Db 181 QLLPTLAFSHTDYINGQMIWYDMSQENFDRLPFAYGIVLTLSQFLS 226

RESULT 11

ID ADO30394 standard; protein; 339 AA.

XX AC ADO30394;

XX DT 29-JUL-2004 (first entry)

XX DE Human GPCR P2Y3L, SEQ ID NO:1497.

XX KW G protein-coupled receptor; GPCR; drug screening; diagnosis;

XX KW transgenic mouse; neurological disorder; adrenal gland disorder;

XX KW colon disorder; intestinal disorder; cardiovascular disorder;

XX KW muscular disorder; blood disorder; immune disorder; bone disorder;

XX KW joint disorder; metabolic disorder; nutritive disorder; cancer;

XX KW kidney disorder; liver disorder; lung disorder; breast disorder;

XX KW ovary disorder; uterus disorder; prostate disorder; testis disorder;

XX KW skin disorder; stomach disorder; pancreas disorder; spleen disorder;

XX KW thymus disorder; thyroid disorder; antiparkinsonian; antiarhythmic;

XX KW cytostatic; antiinflammatory; vasotropic; antianginal; antidiabetic;

XX KW CNS; central nervous system; respiratory; antidiarrhoeic; antiseborrhoeic;

XX KW virucide; hepatotropic; antibacterial; antianaemic; anorectic;

XX KW dermatological; antitumor; antithyroid; antiallergic; anorectic;

XX KW immunosuppressive; nephrotropic; gene therapy; GPCR modulator; human;

XX KW receptor.

XX OS Homo sapiens.

XX PN WO2004040000-A2.

XX PD 13-MAY-2004.

XX XX

XX PF 09-SEP-2003; 2003WO-US028226.

XX PR 09-SEP-2002; 2002US-0409303P.

XX PR 09-APR-2003; 2003US-0461329P.

XX XX

XX PA (PRIM-) PRIMAL INC.

XX XX

XX PI Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J, Li F;

XX PI Madisen L, McIlwain KL, Pavlova MN, Vassilatis D, Zeng H;

XX XX

XX DR WPI; 2004-390329/36.

XX DR N-PSDB; ADO30395.

XX XX

PT Novel mammalian G protein coupled receptors, useful for identifying
PT compounds that modulates diagnosing and treating disease condition
PT associated with GPCR dysfunction e.g. autoimmune diseases, angina
PT pectoris, Parkinson's disease.
XX
XX Claim 151; SEQ ID NO 1497; 542pp; English.
XX
CC The invention relates to human and mouse G protein-coupled receptors
CC (GPCRs) and nucleic acids encoding them. The invention also relates to
CC sequences at least 90% identical to the GPCR proteins and nucleic acids
CC of the invention; methods of treating, preventing or diagnosing diseases
CC associated with GPCRs of the invention; methods of screening for
CC compounds useful in the treatment of GPCR-related diseases; a transgenic
CC mouse comprising a GPCR gene of the invention; a mouse comprising a
CC mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived
CC from the transgenic mice; kits comprising several mice, each of which has
CC a mutation in a different GPCR gene of the invention; and kits comprising
CC probes which hybridize to GPCR polynucleotides of the invention. The
CC invention further discloses variants of the GPCR polypeptides and vectors
CC comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may
CC be used in the diagnosis, treatment or prevention of a wide variety of
CC diseases including neurological disorders (e.g., Alzheimer's disease,
CC depression, diabetic neuropathy, Parkinson's disease or schizophrenia);
CC disorders of the adrenal gland; disorders of the colon or intestine
CC (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel
CC syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or
CC myocardial infarction); muscular disorders; blood disorders (e.g.,
CC anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or
CC AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid
CC arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g.,
CC obesity, enzyme deficiency-related diseases or vitamin deficiency-related
CC diseases); and disorders of the kidney, liver, lung, breast, ovary,
CC uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and
CC thyroid (e.g., cancers). The present sequence represents a GPCR of the
CC invention. Note: The full sequence data for this patent did not form part
CC of the printed specification; those sequences not shown were obtained in
CC electronic format directly from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences.
XX
XX Sequence 339 AA;

Query Match 61.2%; Score 1185; DB 8; Length 339;
Best Local Similarity 99.6%; Pred. No. 3.7e-123;
Matches 225; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MSLTLLPSRSGSRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKVYLSLAYSI 60
Db 1 MSLTLLPSRSGSRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKVYLSLAYSI 60

Qy 61 IFILGLPLNGTVLWHSWGQTKRWSCTATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120
Db 61 IFILGLPLNGTVLWHSWGQTKRWSCTATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120

Qy 121 LLCKLVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYTRRRHAWLGSTTVALVVL 180
Db 121 LLCKLVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYTRRRHAWLGSTTVALVVL 180

Qy 181 QLLPTLAFSHDYINGQMIWDMTSQENFDRLFAYGIVLTLSGFLS 226
Db 181 QLLPTLAFSHDYINGQMIWDMTSQENFDRLFAYGIVLTLSGFLS 226

RESULT 12
ID ADC26000
XX ADC26000 standard; protein; 338 AA.
XX
XX ADC26000;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human purinergic receptor P2Y-related GPCR α 6 protein.
XX
XX virucide; fungicide; antibacterial; cytostatic; analgesic; antidiabetic;

KW anorectic; cardiant; hypotensive; osteopathic; antianginal;
KW antiarteriosclerotic; cerebroprotective; anti-ulcer; antiallergic;
KW nootropic; neuroprotective; antiparkinsonian; G-protein coupled receptor;
KW GPCR; viral; fungal; bacterial infection; immune-related disorder;
KW cancer; pain; diabetes; obesity; anorexia; acute heart failure;
KW hypertension; osteoporosis; angina pectoris; atherosclerosis; stroke;
KW ulcer; allergy; psychotic neurological disorder; schizophrenia; dementia;
KW degenerative disease; Parkinson's; Alzheimer's; dyskinesia; Huntington's;
KW human; GPCR α 6; purinergic receptor P2Y.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX
XX FT Misc-difference 62 /note= "Encoded by TTT"
XX FT Misc-difference 243 /note= "Encoded by AAG"
XX
XX US2003088080-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 21-JUN-2001; 2001US-00885453.
XX
XX PR 20-JUN-2000; 2000US-0212908P.
XX PR 05-DEC-2000; 2000EP-00870289.
XX
XX (COMM/) COMMUNI D.
XX (LANN/) LANNON V.
XX (GOVA/) GOVAERTS C.
XX (PARM/) PARMENTIER M.
XX (DETH/) DETHEUX M.
XX
XX Communi D, Lannoy V, Govaerts C, Parmentier M, Detheux M;
XX WPI; 2003-657983/62.
XX DR N-PSDB; ADC25999.
XX
XX PT New human G-protein coupled receptor, useful for treating receptor-
XX mediated disorders, e.g. infections, cancer, pain, diabetes, obesity,
XX acute heart failure, osteoporosis, stroke, ulcer, allergy, or
XX neurological disorders.
XX
XX Example 3; Page 15-16; 24pp; English.
XX
XX The invention relates to a novel G-protein coupled receptor (GPCR). The
XX receptor, polynucleotide, agonist, reverse agonist and antagonist of the
XX invention may be useful for treating receptor-mediated disorders
XX including viral, fungal or bacterial infections, immune-related disorders
XX such as cancer, pain, diabetes, obesity, anorexia, acute heart failure,
XX hypertension, osteoporosis, angina pectoris, atherosclerosis, stroke,
XX ulcer and allergy, as well as psychotic and neurological disorders such
XX as schizophrenia and dementia, degenerative diseases such as Parkinson's
XX disease and Alzheimer's disease and dyskinesias such as Huntington's
XX disease. The current sequence is that of the human purinergic receptor
XX P2Y-related GPCR α 6 protein of the invention.

XX Sequence 338 AA;

Query Match 60.9%; Score 1179; DB 7; Length 338;
Best Local Similarity 98.2%; Pred. No. 1.7e-122;
Matches 224; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 MSLTLLPSRSGSRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKVYLSLAYSI 60
Db 1 MSLTLLPSRSGSRGALLLEGASRDMEKVDNMTSQEGLCOFSEKYKVYLSLAYSI 60

Qy 61 IFILGLPLNGTVLWHSWGQTKRWSCTATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120
Db 61 IFILGLPLNGTVLWHSWGQTKRWSCTATYLVNLMVADLLVYLLPFLIITYSLDDRWPFGE 120

Qy 121 LLCKLVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYTRRRHAWLGSTTVALVVL 180

Db 121 LLCKLVHFLFYINLYGSIILLTTCISVHQFLGVCHPLCSLPYRTRRHWLGTSTTVALVVL 180

QY 181 QLLPTLAFSHTDYINGQMIWYDWTSGNEDRFLFAYGIVLTLSGFLSLL 228
 |||||
 Db 181 QLLPTLAFSHTDYINGQMIWYDWTSGNEDRFLFAYGIVLTLSGFLSLL 228
 |||||

RESULT 13

ADC86167

ID ADC86167 standard; protein; 271 AA.

XX

AC ADC86167;

XX

DT 01-JAN-2004 (first entry)

XX

DE Human GPCR protein SEQ ID NO:620.

XX

KW human; GPCR; guanosine triphosphate-binding protein coupled receptor;

KW gene therapy.

XX

OS Homo sapiens.

XX

PN EP1270724-A2.

XX

PD 02-JAN-2003.

XX

PF 18-JUN-2002; 2002EP-00013517.

XX

PR 18-JUN-2001; 2001JP-00246789.

XX

PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

PA (ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.

XX

PI Suwa M, Asai K, Akiyama Y, Aburatani H;

XX

DR WPI; 2003-315783/31.

DR N-PSDB; ADC86166.

XX

PT New polynucleotide, useful for preparing a composition for treating a

PT patient in need of increased or suppressed activity or expression of the

PT guanosine triphosphate-binding protein coupled receptor.

XX

PS Claim 2; SEQ ID NO 620; 28pp; English.

XX

CC The invention relates to a novel polynucleotide encoding a guanosine

CC triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of

CC the invention may have a use in gene therapy. The polynucleotide and

CC polypeptide are useful for preparing a composition for treating a patient

CC in need of increased or suppressed activity or expression of the

CC guanosine triphosphate-binding protein coupled receptor. The protein

CC sequences shown in ADC85549-ADC87617 represent GPCR's of the invention.

XX

SQ Sequence 271 AA;

Query Match 48.7%; Score 942; DB 7; Length 271;

Best Local Similarity 86.5%; Pred. No. 3.8e-96;

Matches 179; Conservative 6; Mismatches 22; Indels 0; Gaps 0;

QY 29 MEKVDNMTSQEGLQFQSKYQVYLSLAYSIFILGLPLNGTVLWHGWGQTKRWSCTT 88
 |||||

Db 1 MEKVDNMTSQEGLQFQSKYQVYLSLAYSIFILGLPLNGTVLWHGWGQTKRWSCTT 60
 |||||

QY 89 YLVNLMVADLLVLPFLITYSLDRWPFGEKLLKLVHFLFYINLYGSIILLTTCISVHQ 148
 |||||

Db 61 YLVNLMVADLLVLPFLITYSLDRWPFGEKLLKLVHFLFYINLYGSIILLTTCISVHQ 120
 |||||

QY 149 FLGVCHPLCSLPYRTRRHWLGTSTTVALVQLLPTLAFSHTDYINGQMIWYDWTSGN 208
 |||||

Db 121 FLGVCHPLCSLPYRTRRHWLGTSTTVALVQLLPTLAFSHTDYINGQMIWYDWTSGN 180
 |||||

QY 209 FDRFLFAYGIVLTLSGFLSLLHGFLVLF 235
 |||||

Db 181 LMRGTGTAPARSIRILLVCGFLTICF 207
 |||||

RESULT 14

AAG80935

ID AAG80935 standard; protein; 170 AA.

XX

AC AAG80935;

XX

DT 28-AUG-2001 (first entry)

XX

DE Human nGPCR12.

XX

KW G protein-coupled receptor; nGPCR; seven transmembrane receptor;

KW signal transduction; schizophrenia; thyroid disorder; renal failure;

KW rheumatoid arthritis; CNS disorder; infection; metabolic disease;

KW cardiovascular disease; proliferative disorder; hormonal disorder;

KW neurological disorder; neuronal disorder; Alzheimer's disease; cancer;

KW attention deficit-hyperactivity disorder; attention deficit disorder;

KW Parkinson's disease; migraine; senile dementia; inflammatory disease;

KW rheumatoid arthritis; autoimmune disorder; respiratory ailment;

KW neuroprotective.

XX

OS Homo sapiens.

XX

PN WO200136473-A2.

XX

PD 25-MAY-2001.

XX

PR 16-NOV-2000; 2000WO-US031581.

XX

PR 16-NOV-1999; 99US-0165838P.

PR 17-NOV-1999; 99US-0166071P.

PR 19-NOV-1999; 99US-0166678P.

PR 28-DEC-1999; 99US-0173396P.

PR 22-FEB-2000; 2000US-0184129P.

PR 28-FEB-2000; 2000US-0185421P.

PR 28-FEB-2000; 2000US-0185554P.

PR 02-MAR-2000; 2000US-0186530P.

PR 03-MAR-2000; 2000US-0186811P.

PR 09-MAR-2000; 2000US-0188114P.

PR 17-MAR-2000; 2000US-0190310P.

PR 21-MAR-2000; 2000US-0190800P.

PR 20-APR-2000; 2000US-0198568P.

PR 02-MAY-2000; 2000US-0201190P.

PR 08-MAY-2000; 2000US-0203111P.

PR 25-MAY-2000; 2000US-0207094P.

XX

PA (PHAA) PHARMACIA & UPJOHN CO.

XX

PI Vogeli G, Wood LS, Parodi LA, Hiebsch RR, Lind P, Slightom J;

PI Schellin KA, Kaytes PS, Bannigan CM, Ruff V, Sejlitz T, Huff RM;

XX

DR WPI; 2001-389826/41.

DR N-PSDB; AAH50975.

XX

PT New G protein-coupled receptor (nGPCR-x) and its encoding polynucleotide

PT useful for diagnosing and treating e.g. schizophrenia.

XX

PS Claim 37; Page 78; 261pp; English.

XX

CC The present invention relates to novel G protein-coupled receptors

CC (nGPCRx; where x is 1, 3, 4, 5, 9, 11, 12, 14-18, 20, 21, 22, 24, 27, 28,

CC 31-38, 40, 41, 53-60) and their coding sequences. The present sequence is

CC one such G protein-coupled receptor. GPCRs are also known as seven

CC transmembrane receptors and function in signal transduction. The nGPCRx

CC coding sequences are useful for screening a human to diagnose a disorder

CC affecting the brain or a genetic predisposition, specifically

CC schizophrenia. nGPCRx are useful for identifying compounds useful for

CC treating schizophrenia. Detection of nGPCRx in a sample is useful as a

CC diagnostic tool for diseases or disorders e.g. thyroid disorders, renal

CC failure, rheumatoid arthritis, CNS disorders, infections such as HIV-1,

CC metabolic and cardiovascular diseases, proliferative disorders and

CC hormonal disorders. Modulators of nGPCRx activity have the utility for

CC treating neurological disorders, including schizophrenia, ADHD/ADD
CC (attention deficit-hyperactivity disorder/attention deficit disorder),
CC and neuronal disorders such as Alzheimer's disease, Parkinson's disease,
CC migraine and senile dementia. Additional disorders include inflammatory
CC conditions (e.g. Crohn's disease), rheumatoid arthritis, autoimmune
CC disorders, cancers, respiratory ailments such as asthma, and inflammatory
CC diseases e.g. inflammatory bowel disease
XX
SQ Sequence 170 AA;

Query Match 47.6%; Score 921; DB 4; Length 170;
Best Local Similarity 100.0%; Pred. No. 4.4e-94;
Matches 170; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 83 WSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGLCKLVHFLFYINLYGSILLT 142
Db 1 WSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGLCKLVHFLFYINLYGSILLT 60
QY 143 CISVHQFLGVCPLCSLPYRTRHAWLGTSTWALVQLLPTLAFSHTDYINGQMIWD 202
Db 61 CISVHQFLGVCPLCSLPYRTRHAWLGTSTWALVQLLPTLAFSHTDYINGQMIWD 120
QY 203 MTSQENFDRLFYAGIVLTLSGFLSLGHFGVLTGQEPDQARGEPHEDR 252
Db 121 MTSQENFDRLFYAGIVLTLSGFLSLGHFGVLTGQEPDQARGEPHEDR 170

RESULT 15
ABG93753
ID ABG93753 standard; protein; 170 AA.
XX
AC ABG93753;
XX
DT 26-NOV-2002 (first entry)
XX
DE Human G protein-coupled receptor protein, beGPCR-seq12.
XX
KW Human; receptor; G protein-coupled receptor; GPCR; nGPCR; beGPCR;
KW nG protein coupled receptor; communication; serpentine structure;
KW seven transmembrane receptor; 7TM; mental disorder; diagnosis;
KW genetic predisposition; brain; immune response; gene therapy;
KW anxiety disorder; depression; bipolar disorder; schizophrenia;
KW Huntington's disease; dyskinesia; manic depression; stroke;
KW Parkinson's disease; Alzheimer's disease; diabetes; inflammation; wound;
KW tranquiliser.
XX
OS Homo sapiens.
XX
FN WO200264789-A1.
XX
XX
XX 22-AUG-2002.
XX
XX 14-FEB-2001; 2001WO-US004641.
XX
XX 14-FEB-2001; 2001WO-US004641.
XX
XX (PHAA) PHARMACIA & UPJOHN CO.
XX
XX Lind P, Parodi LA, Vogeli G, Wood LS;
XX
XX
XX WPI; 2002-674879/72.
XX
XX N-FSDB; ABS70208.

XX
XX New nucleic acids and polypeptides of the nG protein-coupled receptor,
XX useful for treating or diagnosing a mental disorder or a disorder
XX affecting the brain, e.g. anxiety disorders, schizophrenia, stroke or
XX Parkinson's disease.

XX Example 1; Page 73; 244pp; English.

XX The invention discloses an isolated human polypeptide, and encoding
XX nucleic acid, for a G protein-coupled receptor (GPCR), particularly the
XX nG protein coupled receptor-14 (nGPCR-14). GPCRs are vital in the

CC communication between cells and their environment and are characterised
CC by a serpentine structure that passes through the cell membrane seven
CC times, hence the reason such receptors are sometimes called seven
CC transmembrane receptors (7TM). The polynucleotides and polypeptides are
CC useful for identifying an nGPCR allelic variant that correlates with a
CC mental disorder, for isolating an antibody that binds to an epitope of
CC the polypeptide, for identifying a compound that binds the polypeptide or
CC polynucleotide and/or modulates its biological activity, for screening a
CC human subject to diagnose a disorder, or a genetic predisposition to a
CC disorder, affecting the brain or a genetic disposition to the disorder,
CC for identifying compounds useful for the treatment of a mental disorder,
CC and for identifying a compound useful as a modulator of binding between
CC nGPCR-14 and a binding partner of nGPCR-14. The polypeptide is also
CC useful for inducing an immune response in a mammal. The nucleic acid or
CC polypeptide is particularly useful, using gene therapy, for treating e.g.
CC anxiety disorders, depression, bipolar disorder, schizophrenia,
CC Huntington's disease, dyskinesias, manic depression, stroke, Parkinson's
CC disease or Alzheimer's disease. The nucleic acid and polypeptide may also
CC be used for treating diabetes, inflammation or wounds. The sequences
CC presented in ABG93747-ABG93793, ABG93795 and ABG93796 are the nGPCR (also
CC referred to as beGPCRs) proteins
XX

SQ Sequence 170 AA;

Query Match 47.6%; Score 921; DB 5; Length 170;
Best Local Similarity 100.0%; Pred. No. 4.4e-94;
Matches 170; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 83 WSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGLCKLVHFLFYINLYGSILLT 142
Db 1 WSCATTYLVNLMVADLLVLLPFLIITYSLDDRPFGLCKLVHFLFYINLYGSILLT 60
QY 143 CISVHQFLGVCPLCSLPYRTRHAWLGTSTWALVQLLPTLAFSHTDYINGQMIWD 202
Db 61 CISVHQFLGVCPLCSLPYRTRHAWLGTSTWALVQLLPTLAFSHTDYINGQMIWD 120
QY 203 MTSQENFDRLFYAGIVLTLSGFLSLGHFGVLTGQEPDQARGEPHEDR 252
Db 121 MTSQENFDRLFYAGIVLTLSGFLSLGHFGVLTGQEPDQARGEPHEDR 170

Search completed: November 4, 2004, 16:57:14
Job time : 159 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: November 4, 2004, 16:51:44 ; Search time 40 Seconds
(without alignments)
596.862 Million cell updates/sec

Title: US-10-763-972-2

Perfect score: 1936

Sequence: 1 MSLILLPSRSGSRGSRGAL.....QNKLGHPAGKRCPCGLNRS 360

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCITUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	421	21.7	374	4	US-09-745-842-15
2	395	20.4	328	3	US-08-513-974B-39
3	395	20.4	328	3	US-08-513-974B-371
4	395	20.4	328	4	US-08-461-436B-39
5	322.5	20.3	328	3	US-08-513-974B-56
6	322.5	20.3	328	3	US-08-513-974B-380
7	322.5	20.3	328	4	US-09-461-436B-56
8	387.5	20.0	328	4	US-09-745-842-18
9	387.5	20.0	377	4	US-09-745-842-17
10	383.5	19.8	327	3	US-08-513-974B-372
11	374.5	19.3	375	1	US-08-442-134A-2
12	374.5	19.3	375	1	US-08-444-581B-2
13	374.5	19.3	375	1	US-08-446-088A-2
14	374.5	19.3	375	2	US-08-559-524A-3
15	374.5	19.3	375	3	US-08-749-707-3
16	374.5	19.3	375	4	US-09-947-922-3
17	369	19.1	373	3	US-08-513-974B-373
18	368.5	19.0	328	3	US-08-459-046-2
19	368.5	19.0	328	4	US-09-102-710B-2
20	367	19.0	365	4	US-09-745-842-16
21	367	19.0	365	4	US-09-077-173D-2
22	364.5	18.8	374	4	US-08-102-710B-3
23	340	17.6	362	3	US-08-513-974B-374
24	328	16.9	373	4	US-09-745-842-14
25	326.5	16.9	373	2	US-08-559-524A-4
26	326.5	16.9	373	3	US-08-749-707-4
27	326.5	16.9	373	4	US-09-947-922-4

28 274.5 14.2 302 2 US-08-467-948A-30 Sequence 30, Appl
29 274.5 14.2 302 3 US-08-467-947A-30 Sequence 30, Appl
30 273.5 14.1 344 2 US-08-467-948A-8 Sequence 8, Appl
31 273.5 14.1 344 3 US-08-467-947A-8 Sequence 8, Appl
32 258.5 13.4 408 2 US-08-781-250-2 Sequence 2, Appl
33 250.5 12.9 339 1 US-08-742-440A-6 Sequence 6, Appl
34 249 12.9 339 1 US-08-153-848-44 Sequence 44, Appl
35 249 12.9 339 2 US-08-812-871-3 Sequence 3, Appl
36 249 12.9 339 3 US-09-299-843A-44 Sequence 44, Appl
37 249 12.9 339 3 US-09-088-337B-44 Sequence 44, Appl
38 249 12.9 339 4 US-09-170-496D-32 Sequence 32, Appl
39 249 12.9 339 4 US-09-170-496D-182 Sequence 182, Appl
40 249 12.9 339 5 PCT-US93-11153-44 Sequence 44, Appl
41 249 12.9 339 5 PCT-US95-07180-2 Sequence 2, Appl
42 248.5 12.8 391 1 US-07-816-283-2 Sequence 2, Appl
43 248.5 12.8 391 1 US-08-417-103-2 Sequence 2, Appl
44 248.5 12.8 391 1 US-08-417-103-14 Sequence 14, Appl
45 246 347 4 US-08-403-271A-24 Sequence 24, Appl

ALIGNMENTS

RESULT 1

US-09-745-842-15
; Sequence 15, Application US/09745842
; Patent No. 6762029

GENERAL INFORMATION:

APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
APPLICANT: Ramakrishnan-DuBridge, Vanitha

APPLICANT: Julius, David

APPLICANT: Hollopeter, Gunter

APPLICANT: Cor Therapeutics, Inc.

TITLE OF INVENTION: P2Y12 Receptor

FILE REFERENCE: 44481-5053-US

CURRENT APPLICATION NUMBER: US/09/745,842

CURRENT FILING DATE: 2000-12-26

PRIOR APPLICATION NUMBER: US 60/171,622

PRIOR FILING DATE: 1999-12-23

NUMBER OF SEQ ID NOS: 21

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 15

LENGTH: 374

TYPE: PRT

ORGANISM: Meleagris gallopavo

FEATURE:

OTHER INFORMATION: Turkey P2Y nucleotide receptor; tp2ynovel

US-09-745-842-15

Query Match

Best Local Similarity 21.7%; Score 421; DB 4; Length 374;

Matches 81; Conservative 40; Mismatches 72; Indels 8; Gaps 3;

QY 36 TSQEQLCOFSEKYQVLSLAYSIFILGLPLNGTIVLHWSGQTKRWSGATYLVNLMV 95

Db 26 TAAEAKCVNEEFKILLPIISYGVFVVGLPLNSAMWIFVSRMRPNWNTTYFNLAI 85

QY 96 ALLIVL-LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSLILLICISVHQFLGVCH 154

Db 86 SDTLVYFSLTYVYADRNWNPFGKVFCKIVRFLFYANLYSSILFLTCISVHYRYGICH 145

QY 155 PLCSIPYRTRRHAWLGTSTTVALVQLPLTAFSHDTYINGQMIWYDMTSGENFDRLFA 214

Db 146 PIRSLKWKTKARLICVGVWLVVTCILPNLIFVTSSKONSTLCHDTTKPEEDHYVH 205

QY 215 YGIVITLSCFLSLGHGVLFP 235

Db 206 YS-----SSIMALL--FGIPF 219

RESULT 2

US-08-513-974B-39

Sequence 39, Application US/08513974B
Patent No. 6114139
GENERAL INFORMATION:
APPLICANT: Hinuma, Shuji
APPLICANT: Hosoya, Masaki
APPLICANT: Fujii, Ryo
APPLICANT: Ohtaki, Tetsuya
APPLICANT: Fukusumi, Shoji
APPLICANT: Ohci, Kazuhiro
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
PRODUCTION, AND USE THEREOF
NUMBER OF SEQUENCES: 380
CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
STREET: 130 Water Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/513,974B
FILING DATE: 14-SEP-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-093989
FILING DATE: 19-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-057186
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-007177
FILING DATE: 20-JAN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-326611
FILING DATE: 28-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-270017
FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236357
FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236356
FILING DATE: 30-SEP-1994
APPLICATION NUMBER: JP 6-189274
FILING DATE: 11-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-189273
FILING DATE: 11-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-189272
FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Resnick, David S.
REGISTRATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 45753
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEFAX: 617-523-6440
INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 328 amino acids
TYPE: amino acid
STRANDEDNESS:

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-513-974B-39
Query Match 20.4%; Score 395; DB 3; Length 328;
Best Local Similarity 31.9%; Pred. No. 4.2e-27;
Matches 106; Conservative 55; Mismatches 137; Indels 34; Gaps 9;
QY 29 MEKVMNTSQEGL-----COFSEKYKQVYLSLAYSIIFILGLPLNGTIVLHWSWGQTKRWS 84
Db 1 MEQ-DNGTICAPGLPTTCVYREDFKRLLLTPYSVLVVVGFLNLCVIAQICASRRLT 59
QY 85 CATTYLVNLMVADLLYL-LPFLIITYSLDDRWPFGEELCKLVHFLFYINLYGSIILLTC 143
Db 60 RSAVYTLNLALADLMYACSLPLIINYARGDHWPFGLACRFVRFVYANLHGSIFLTC 119
QY 144 ISVHQFLGVCHPLCSLPYR-TRRHAWLGTSTTVALVVLQLLPLAFSHDYINGQMIWYD 202
Db 120 ISQRYLGICHLASWHKKGRRAAWVGWVWLVAVTAOCLTAVFAIGIORNTVCYD 179
QY 203 MTSQENFDRLFAYGIVLTLSGEL-----SLHGFGVLTGQEPDQARGEPHEDRHSPSQ 258
Db 180 LSPPIILSTRVLPYGMAITVIGFLPFIALLCVCRMARELCRQDGPAGFVAQERRSKAAR 239
QY 259 VHPDHTGTWPLHPFALPYHSLLLPHLL-SAFSGLPALDGSQCGLODMASGECEQL 317
Db 240 M-----AVVAAVFAISFPFHITKTAYLAVRSTFGVSCPVLTFATAAYKQTR 287
QY 318 PQPS-----PVLSP-----KGGKNRVRLLOKL 339
Db 288 PFASVNSVLDPILFYFTQOKFRRHQPHDLQLRL 319
RESULT 3
US-08-513-974B-371
Sequence 371, Application US/08513974B
Patent No. 6114139
GENERAL INFORMATION:
APPLICANT: Hinuma, Shuji
APPLICANT: Hosoya, Masaki
APPLICANT: Fujii, Ryo
APPLICANT: Ohtaki, Tetsuya
APPLICANT: Fukusumi, Shoji
APPLICANT: Ohci, Kazuhiro
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
PRODUCTION, AND USE THEREOF
NUMBER OF SEQUENCES: 380
CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
STREET: 130 Water Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/513,974B
FILING DATE: 14-SEP-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-093989
FILING DATE: 19-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-057186
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 7-007177
FILING DATE: 20-JAN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-326611
FILING DATE: 28-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-270017
FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236357
FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236356
FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-189274
FILING DATE: 11-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-189273
FILING DATE: 11-AUG-1945
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-189272
FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Resnick, David S.
REGISTRATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 45753
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEFAX: 617-523-6440
INFORMATION FOR SEQ ID NO: 371:
SEQUENCE CHARACTERISTICS:
LENGTH: 328 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-513-974B-371

Query Match 20.4%; Score 395; DB 3; Length 328;
Best Local Similarity 31.9%; Pred. No. 4.2e-27; Indels 34; Gaps 9;
Matches 106; Conservative 55; Mismatches 137; Indels 34; Gaps 9;
QY 29 MEKVDNMTSBOGL-----COFSEKVKQVLSLAYSIIFILGLPLNGTVLWHSGQTKRWS 84
DB 1 MEQ-DNGTIQAPGLPPTTCVREDPKRLLTTPVSVLVVGLPLNICVIAQICASRRITLT 59
QY 85 CATTYVNLVWADLLYVL-LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSILLTLC 143
DB 60 RSAVYTLNLALADLMYACSLPLLIYNYARGDHPFGDLACRFVRFLFYANLHGSILLTLC 119
QY 144 ISVHOFGLVCHPLCSLPYR-TRRHWLGTSTTVALVVLQLLPLTAFSHTDYINGQMIWYD 202
DB 120 ISFQYILGICHELASWHRGRRAAWVCGVWMLAVTAQCLPTAVPAATGIGQRNRTVCYD 179
QY 203 MTSQENFDRLPAYGIVITLGSFL-----SLIGHFGVLFTDGOEPDQARGEHPHQRQSPSQ 258
DB 180 LSPPIILSTRVLPYGMALTVIGFLPFTLLACYCRWARRLCRDGPAGPVAQERRSKAAR 239
QY 259 VHPDHPGTGVWPLHPLFCALPVHSLLLPHLL-LSAFSGLPALDGSQCGLQDMEASGECEQL 317
DB 240 M-----AVVVAUFAISFLPFTHTKATYLAVRSTPGVSCVPLTFPAAYKGR 287
QY 318 PQPS-----FVLSF-----KGGKNRVLQKL 339
DB 288 PFASVNSVLDILFYFTQKFRFRQPHLLQRL 319

RESULT 4
US-09-461-436B-39
Sequence 39, Application US/09461436B
Patent No. 6538107
GENERAL INFORMATION:
APPLICANT: Shuji Hinuma

Yasuaki Ito
Ryo Fujii
TITLE OF INVENTION: G Protein Coupled Receptor Protein,
Production, And Use Thereof
NUMBER OF SEQUENCES: 61
CORRESPONDENCE ADDRESS:
ADDRESSEE: Edwards & Angell, LLP
STREET: 101 Federal Street
CITY: BOSTON
STATE: MA
COUNTRY: USA
ZIP: 02209
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/461,436B
FILING DATE: 14-DEC-1999
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/513,974
FILING DATE: 14-SEP-1995
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
APPLICATION NUMBER: 7-003989
FILING DATE: 19-APR-1995
APPLICATION NUMBER: 7-057186
FILING DATE: 16-MAR-1995
APPLICATION NUMBER: 7-007177
FILING DATE: 20-JAN-1995
APPLICATION NUMBER: 6-326611
FILING DATE: 28-DEC-1994
APPLICATION NUMBER: 6-270017
FILING DATE: 02-NOV-1994
APPLICATION NUMBER: 6-236357
FILING DATE: 30-SEP-1994
APPLICATION NUMBER: 6-236356
FILING DATE: 30-SEP-1994
APPLICATION NUMBER: 6-189274
FILING DATE: 11-AUG-1994
APPLICATION NUMBER: 6-189273
FILING DATE: 11-AUG-1994
APPLICATION NUMBER: 6-189272
FILING DATE: 11-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: CONLIN, DAVID G.
REGISTRATION NUMBER: <Unknown>
REFERENCE/DOCKET NUMBER: 45753 DIV2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-439-4444
TELEFAX: 617-439-4170
INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 328 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 39:
US-09-461-436B-39

Query Match 20.4%; Score 395; DB 4; Length 328;
Best Local Similarity 31.9%; Pred. No. 4.2e-27;
Matches 106; Conservative 55; Mismatches 137; Indels 34; Gaps 9;
QY 29 MEKVDNMTSBOGL-----COFSEKVKQVLSLAYSIIFILGLPLNGTVLWHSGQTKRWS 84
DB 1 MEQ-DNGTIQAPGLPPTTCVREDPKRLLTTPVSVLVVGLPLNICVIAQICASRRITLT 59
QY 85 CATTYVNLVWADLLYVL-LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSILLTLC 143

Db 60 RSVATVNLALADLMVACSLPILLYNARGDHPGDIACRFVRLFYANLHGSILFLTC 119
QY 144 ISVHQLGVCHPLCSLPYR-TRRHAWLGTSTTVALVVLQLLPTLAFSHTDYINGQMIMYD 202
Db 120 ISFQYLGICHLASWHKGGRRAAWVGVVWLAATAQCLPTAVFAATGIQRNRTVCYD 179
QY 203 MTSQENFDFLFGVIVLTLSGFL-----SILGHFGVLFDGQEPDQARCEPHEDRQHSQS 258
Db 180 LSPILSTRYLPYGMALTVIGLFFIALLACYCRMARRLCQDGPAGPVACERRSKAAR 239
QY 259 VHPDPTGVWPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQGLQDMEASGECEQL 317
Db 240 M-----AVVAAVFAISLPHITKTAFLAVRSIPGVSCPVLETFFAAYKTR 287
QY 318 PQPS-----PVLSP-----KGGKRVRLLOKL 339
Db 288 PFASVNSVLDPLFYFTQOKFRPHDLLOKL 319

RESULT 5
US-08-513-974B-56
; Sequence 56, Application US/08513974B
; Patent No. 6114139
; GENERAL INFORMATION:
; APPLICANT: Hinuma, Shuji
; APPLICANT: Hosoya, Masaki
; APPLICANT: Fujii, Ryo
; APPLICANT: Ohtaki, Tetsuya
; APPLICANT: Fukusumi, Shoji
; APPLICANT: Ogi, Kazuhiro
; TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
; TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
; NUMBER OF SEQUENCES: 380
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 Water Street
; CITY: Boston
; STATE: MA
; ZIP: 02109

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/513,974B
FILING DATE: 14-SEP-1995
CLASSIFICATION: 536

PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP95/01599
FILING DATE: 10-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-093989
FILING DATE: 19-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-057186
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 7-007177
FILING DATE: 20-JAN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-326611
FILING DATE: 28-DEC-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-270017
FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236357
FILING DATE: 30-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 6-236356
FILING DATE: 30-SEP-1994

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-189274
; FILING DATE: 11-AUG-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-189273
; FILING DATE: 11-AUG-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-189272
; FILING DATE: 11-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Resnick, David S.
; REGISTRATION NUMBER: 34,235
; REFERENCE/DOCKET NUMBER: 45753
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-523-3400
; TELEFAX: 617-523-6440
; INFORMATION FOR SEQ ID NO: 56:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 328 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-513-974B-56

Query Match 20.3%; Score 392.5; DB 3; Length 328;
Best Local Similarity 33.0%; Pred. No. 6.9e-27;
Matches 109; Conservative 42; Mismatches 142; Indels 37; Gaps 9;

QY 33 DMNTSQEQL-----QPFSEKYQVLSLAYSIIFILGPLNGTVLWHSWGQYKRWSCATT 88
Db 4 DNGTQALGLPPTTCVYRENFKQLLPVYSVAAGLPLNICVITQICTSRALLTRTAV 63
QY 89 YLVNLMVADLLVYL-LPELIIITYSLDDRPFGELCKLVHFLFYINLYGSIILLTICISVH 147
Db 64 YTUNLALADLLVACSLPILLYNARGDHPGDIACRFVRLFYANLHGSILFLTCISFQ 123
QY 148 QFLGVCHPLCSLPYR-TRRHAWLGTSTTVALVVLQLLPTLAFSHTDYINGQMIMYDMSQ 206
Db 124 RYLGIChPLAPWHKGGRRAAWVGVVWLAATAQCLPTAVFAATGIQRNRTVCYDLSPP 183
QY 207 ENFDRLFGVIVLTLSGFL-----SILGHFGVLFDGQEPDQARCEPHEDRQHSQSQVHPD 262
Db 184 ALATHNYPYGMALTVIGLFFIALLACYCRMARRLCQDGPAGPVACERRSKAAR 231
QY 263 HPTGVWPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQGLQDMEASGECEQLPQP- 320
Db 232 ERGKAARMVAVVAAAFASFLPFHITKTAFLAVRSIPGVSCPVLETFFAAYKTRPF 289
QY 321 -----SPVLSF-----KGGKRVRLLOKL 339
Db 290 ASANSVLDPLFYFTQOKFRPHDLLOKL 319

RESULT 6
US-08-513-974B-380
; Sequence 380, Application US/08513974B
; Patent No. 6114139
; GENERAL INFORMATION:
; APPLICANT: Hinuma, Shuji
; APPLICANT: Hosoya, Masaki
; APPLICANT: Fujii, Ryo
; APPLICANT: Ohtaki, Tetsuya
; APPLICANT: Fukusumi, Shoji
; APPLICANT: Ogi, Kazuhiro
; TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
; TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
; NUMBER OF SEQUENCES: 380
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
; STREET: 130 Water Street
; CITY: Boston
; STATE: MA

TELEFAX: 617-439-4170
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
LENGTH: 328 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 56:
US-09-461-436B-56

Query Match 20.3%; Score 392.5; DB 4; Length 328;
Best Local Similarity 33.0%; Pred. No. 6.9e-27;
Matches 109; Conservative 42; Mismatches 142; Indels 37; Gaps 9;
QY 33 DNTSQEQGL-----CQFSKRYKQVLSLAYSIIIFILGLPLNGTVLWHSWGQTKRWSGATT 88
DB 4 DNGTQALGLPPTTCVYRENFKQLLLPPVYSAVLAAGLPLNICVITQICTSRALTRTAV 63
QY 89 YLVNLMVADLLYL-LPFLIITYSLDDRPFGEELCKLVHFLFYINLYGSIILLTICISVH 147
DB 64 YTLNLALADLLYACSLPLLYNYAQQDHPFGDFACRLVRFLFYANLHGSILFLTCISFQ 123
QY 148 QFLGVCHPLCSLPYR-TRRHAWLGSTTWALVQLLPLTAFSHTDYINGQMIWDMTSQ 206
DB 124 RYLGIHCHPLAPWHKRGRRRAALVAVVAVLAVTTQCLPTAIFATGIQNRNRTVCYDLSPP 183
QY 207 ENFDRLFAYGIVLTLSGFL-----SLIGHFVLFTDQGEPPDQARGPHEPHDRQHSPOVHPD 262
DB 184 ALATHYMPYGMALTVIGFLFPFAALLACYCLLAC-----RLCRQDGPAPVPAQ 231
QY 263 HPTGVWPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQGLQDMEASGECEQLPOP- 320
DB 232 ERRGKAARMVAVVAAFAISFLPFHITKTAYLAVRSTPGVPCIV--LEAFAAAVKGTRPF 289
QY 321 -----SPVLSF-----KGGKRVRLLOKL 339
DB 290 ASANSVLDPLIFYFTQKFRRRPHELLLOKL 319

RESULT 8

US-09-745-842-18
Sequence 18, Application US/09745842
Patent No. 6762029
GENERAL INFORMATION:
APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
APPLICANT: Ramakrishnan-Dubridge, Vanitha
APPLICANT: Julius, David
APPLICANT: Holloper, Gunter
APPLICANT: COR Therapeutics, Inc.
TITLE OF INVENTION: P2Y12 Receptor
FILE REFERENCE: 44481-5053-US
CURRENT APPLICATION NUMBER: US/09/745,842
CURRENT FILING DATE: 2000-12-26
PRIOR APPLICATION NUMBER: US 60/171,622
PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 18
LENGTH: 328
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: P2Y6 receptor
US-09-745-842-18

Query Match 20.0%; Score 387.5; DB 4; Length 328;
Best Local Similarity 32.7%; Pred. No. 1.9e-26;
Matches 108; Conservative 42; Mismatches 143; Indels 37; Gaps 9;
QY 33 DNTSQEQGL-----CQFSKRYKQVLSLAYSIIIFILGLPLNGTVLWHSWGQTKRWSGATT 88

DB 4 DNGTQALGLPPTTCVYRENFKQLLLPPVYSAVLAAGLPLNICVITQICTSRALTRTAV 63
QY 89 YLVNLMVADLLYL-LPFLIITYSLDDRPFGEELCKLVHFLFYINLYGSIILLTICISVH 147
DB 64 YTLNLALADLLYACSLPLLYNYAQQDHPFGDFACRLVRFLFYANLHGSILFLTCISFQ 123
QY 148 QFLGVCHPLCSLPYR-TRRHAWLGSTTWALVQLLPLTAFSHTDYINGQMIWDMTSQ 206
DB 124 RYLGIHCHPLAPWHKRGRRRAALVAVVAVLAVTTQCLPTAIFATGIQNRNRTVCYDLSPP 183
QY 207 ENFDRLFAYGIVLTLSGFL-----SLIGHFVLFTDQGEPPDQARGPHEPHDRQHSPOVHPD 262
DB 184 ALATHYMPYGMALTVIGFLFPFAALLACYCLLAC-----RLCRQDGPAPVPAQ 231
QY 263 HPTGVWPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQGLQDMEASGECEQLPOP- 320
DB 232 ERRGKAARMVAVVAAFAISFLPFHITKTAYLAVRSTPGVPCIV--LEAFAAAVKGTRPF 289
QY 321 -----SPVLSF-----KGGKRVRLLOKL 339
DB 290 ASANSVLDPLIFYFTQKFRRRPHELLLOKL 319

RESULT 9

US-09-745-842-17
Sequence 17, Application US/09745842
Patent No. 6762029
GENERAL INFORMATION:
APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
APPLICANT: Ramakrishnan-Dubridge, Vanitha
APPLICANT: Julius, David
APPLICANT: Holloper, Gunter
APPLICANT: COR Therapeutics, Inc.
TITLE OF INVENTION: P2Y12 Receptor
FILE REFERENCE: 44481-5053-US
CURRENT APPLICATION NUMBER: US/09/745,842
CURRENT FILING DATE: 2000-12-26
PRIOR APPLICATION NUMBER: US 60/171,622
PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patent in Ver. 2.1
SEQ ID NO 17
LENGTH: 377
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: P2Y2 purinergic receptor; p2ur
US-09-745-842-17

Query Match 20.0%; Score 387.5; DB 4; Length 377;
Best Local Similarity 32.7%; Pred. No. 2.3e-26;
Matches 117; Conservative 41; Mismatches 119; Indels 81; Gaps 13;
QY 43 CQFSKRYKQVLSLAYSIIIFILGLPLNGTVLWHSWGQTKRWSGATTYLVNLMVADLLYL 102
DB 25 CRENEDEKVLPLPVSYGVVCLGCLNAVALYIFLCRLKTNASTYMFHFLAVSDALYAA 84
QY 103 -LPFLIITYSLDDRPFGEELCKLVHFLFYINLYGSIILLTICISVHOFVCHPLCSLPY 161
DB 85 SLFLLVYVYARGDHPFSTVLCCLVRFLFYINLYGSIILLTICISVHRCVLRPDRSLRW 144
QY 162 RTRRHAWLGSTTWALVQLLPLTAFSHTDYINGQMIWDMTSQNFDRLFAYGIVLT 221
DB 145 GRARYARRVAGAVVAVLAVLACQAPVLYFTTSAGGRVTCHTDSAPELFSRFVAYSSVM-- 202
QY 222 SGFLSLHGHGVLF-----TDQGEPPDQARGPHEPHDRQHSPOVHPD 261
DB 203 ---LGLL---FAVPFVILVYVLMARLLKPAYGTSG-----GLPRAKRSVKT--- 246
QY 262 DHTGVWPLHPLF--CALPVH-----SLLPHLLSAFS-----GLPALDGSQCG 304
DB 247 -----TAVLAVPALCFLPFHITRTLYYSFRSLDLSCHTLNAINMAYKTRPLASANS- 300

QY 305 LQMEASGECEQLPQSPVLSFKGKNRVLLQKLQKLNKGEHPA--GRKRCPLNRS 360
Db 301 -----LDPVLYLAGQLVRFARDKPE-PTGSPATPARRRL-GLRRS 341

RESULT 10

US-08-513-974B-372
Sequence 372, Application US/08513974B
Patent No. 6114139

GENERAL INFORMATION:

APPLICANT: Hinuma, Shuji
APPLICANT: Hosoya, Masaki
APPLICANT: Fujii, Ryo
APPLICANT: Ontaki, Tetsuya
APPLICANT: Fukusumi, Shoji
APPLICANT: Ohgi, Kazuhiro
TITLE OF INVENTION: G PROTEIN COUPLED RECEPTOR PROTEIN,
TITLE OF INVENTION: PRODUCTION, AND USE THEREOF
NUMBER OF SEQUENCES: 380

CORRESPONDENCE ADDRESS:

ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN, LLP
STREET: 130 Water Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02109

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/513.974B

FILING DATE: 14-SEP-1995

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/JP95/01599

FILING DATE: 10-AUG-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 7-093989

FILING DATE: 19-AUG-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 7-057186

FILING DATE: 16-MAR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 7-007177

FILING DATE: 20-JAN-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-326611

FILING DATE: 28-DEC-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-270017

FILING DATE: 02-NOV-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-236357

FILING DATE: 30-SEP-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-236356

FILING DATE: 30-SEP-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-189274

FILING DATE: 11-AUG-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-189273

FILING DATE: 11-AUG-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: JP 6-189272

FILING DATE: 11-AUG-1994

ATTORNEY/AGENT INFORMATION:

NAME: Resnick, David S.

REGISTRATION NUMBER: 34,235

REFERENCE/DOCKET NUMBER: 45753

INFORMATION FOR SEQ ID NO: 2:

INFORMATION FOR SEQ ID NO: 3:

INFORMATION FOR SEQ ID NO: 4:

INFORMATION FOR SEQ ID NO: 5:

INFORMATION FOR SEQ ID NO: 6:

INFORMATION FOR SEQ ID NO: 7:

INFORMATION FOR SEQ ID NO: 8:

INFORMATION FOR SEQ ID NO: 9:

INFORMATION FOR SEQ ID NO: 10:

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-523-3400

TELEFAX: 617-523-6440

INFORMATION FOR SEQ ID NO: 372:

SEQUENCE CHARACTERISTICS:

LENGTH: 327 amino acids

TYPE: amino acid

STRANDEDNESS:

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-513-974B-372

Query Match

19.8%; Score 383.5; DB 3; Length 327;

Best Local Similarity 40.9%; Pred. No. 4.3e-26;

Matches 83; Conservative 32; Mismatches 81; Indels 7; Gaps 4;

QY 29 MEKVDMTSQEQL-----CFSEKIKQVYLSLAYSLIIFILGLPLNGTYLWHSWGQTKWS 84

Db 1 MEQ-DNGTIQAPGLPTTCVYREDPKRLLLTPVSVLWVGLPLNCVIAQICASRRILT 59

QY 85 CATTYLVNLMVADLLVVL-LPFLIITYSLDDRWPGELLCKLVHFLFYINLYGSIILLTC 143

Db 60 RSAVYTLNLAADLMYACSLPLLIYNYARCOWHPFGDLACRFVRFYANLHGSILFTTC 119

QY 144 ISVHOFGLVCHPLCSLPYR-TRRHAWLGTSTTWALVVLQLLPTLAFSHTDYINGQMIYD 202

Db 120 ISFQRYLGICHPLASWHKGGGRRAAWVGVVWLAVTAQCLRTAVFAATGIQRNRTVCYD 179

QY 203 MTSQENFRLFAYGIVILSGFL 225

Db 180 LSPPIILSTRYLEFGMALTVIGFL 202

RESULT 11

US-08-442-134A-2

Sequence 2, Application US/08442134A

Patent No. 5596088

GENERAL INFORMATION:

APPLICANT: Boucher, Richard C.

APPLICANT: Weisman, Gary A.

APPLICANT: Turner, John T.

APPLICANT: Harden, Thomas K.

APPLICANT: Parr, Claude E.

APPLICANT: Sullivan, Daniel M.

APPLICANT: Erb, Laura

APPLICANT: Lustig, Kevin D.

TITLE OF INVENTION: DNA Encoding the Human P2U Receptor and

TITLE OF INVENTION: Null Cells Expressing P2U Receptors

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSEE: Bell, Seltzer, Park & Gibson

STREET: Post Office Drawer 34009

CITY: Charlotte

STATE: No. 5596088th Carolina

COUNTRY: USA

ZIP: 28234

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/442,134A

FILING DATE: 16-MAY-1995

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Sibley, Kenneth D.

REGISTRATION NUMBER: 31,665

REFERENCE/DOCKET NUMBER: 5470-71A

TELECOMMUNICATION INFORMATION:

TELEPHONE: 919-420-2200

TELEFAX: 919-881-3175

INFORMATION FOR SEQ ID NO: 2:

INFORMATION FOR SEQ ID NO: 3:

INFORMATION FOR SEQ ID NO: 4:

INFORMATION FOR SEQ ID NO: 5:

INFORMATION FOR SEQ ID NO: 6:

INFORMATION FOR SEQ ID NO: 7:

INFORMATION FOR SEQ ID NO: 8:

INFORMATION FOR SEQ ID NO: 9:

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-442-134A-2

Query Match 19.3%; Score 374.5; DB 1; Length 375;
Best Local Similarity 32.7%; Pred. No. 3.2e-25;
Matches 115; Conservative 43; Mismatches 123; Indels 71; Gaps 13;
QY 43 CQSEKVKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSCATTYLVNLMVADLLVYL 102
DB 25 CRNEDFKVLLPVSGVGVCLGCLNAVGLIFLCRLKTNASTTYMFHLAVSDALYAA 84
QY 103 -LPFLITYSLDRWPFGBELLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPY 161
DB 85 SLPLLYVYARGDHPFSTVLCVLRFLFYTNLYCSILFLTICISVHRCGLVLRPLRSRW 144
QY 162 RTRRHAWLGSTTWALVQLLPTLAFSHTDYINGOMIWDYMTSOENFDRLFAYGIVLTL 221
DB 145 GRARYARRVAGAVWLVLAQAPVLYFVTTIS-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201
QY 222 SGFLSILGHFGVLF-----TDGOEPDQARGEHPEDHQHSPSQVHP 261
DB 202 ---LGLL--FAVPFAVLVCYVLMARRLLKPAYGTSG-----GLPRAKRSVRT--- 245
QY 262 DHTGVPWPLHPLF-CALPYH-----SLLPHLLLSAFSGLPALDQSCGLQDME 309
DB 246 ----IAVLAVFALCFPLFHVTRTYYSFRSLDLSCHTLNAIN-----MAYKVTRLA 293
QY 310 ASGECEQLPQSPVLSFGKGNRVRLLOKLRONKLGHEHPA-GRKRCPLGNRS 360
DB 294 SANSC-----LDPVLYFLAGQLRVFARDAKP-PTGSPSPATPARRTLGLRRS 339

RESULT 12

US-08-444-581B-2
Sequence 2, Application US/08444581B
Patent No. 5607836
GENERAL INFORMATION:
APPLICANT: Boucher, Richard C.
APPLICANT: Weisman, Gary A.
APPLICANT: Turner, John T.
APPLICANT: Harden, Thomas K.
APPLICANT: Parr, Claude E.
APPLICANT: Sullivan, Daniel M.
APPLICANT: Erb, Laura
APPLICANT: Lustig, Kevin D.
TITLE OF INVENTION: DNA Encoding the Human P2U Receptor and
TITLE OF INVENTION: Null Cells Expressing P2U Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bell, Seltzer, Park & Gibson
STREET: Post Office Drawer 34009
CITY: Charlotte
STATE: No. 5607836th Carolina
COUNTRY: USA
ZIP: 28234
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/444.581B
FILING DATE: 19-MAY-1995
CLASSIFICATION: 435
PRIORITY APPLICATION NUMBER: US 08/442,134
FILING DATE: 16-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: Sibley, Kenneth D.

REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470-71A
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-420-2200
TELEFAX: 919-881-3175
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-444-581B-2

Query Match 19.3%; Score 374.5; DB 1; Length 375;
Best Local Similarity 32.7%; Pred. No. 3.2e-25;
Matches 115; Conservative 43; Mismatches 123; Indels 71; Gaps 13;
QY 43 CQSEKVKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSCATTYLVNLMVADLLVYL 102
DB 25 CRNEDFKVLLPVSGVGVCLGCLNAVGLIFLCRLKTNASTTYMFHLAVSDALYAA 84
QY 103 -LPFLITYSLDRWPFGBELLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPY 161
DB 85 SLPLLYVYARGDHPFSTVLCVLRFLFYTNLYCSILFLTICISVHRCGLVLRPLRSRW 144
QY 162 RTRRHAWLGSTTWALVQLLPTLAFSHTDYINGOMIWDYMTSOENFDRLFAYGIVLTL 221
DB 145 GRARYARRVAGAVWLVLAQAPVLYFVTTIS-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201
QY 222 SGFLSILGHFGVLF-----TDGOEPDQARGEHPEDHQHSPSQVHP 261
DB 202 ---LGLL--FAVPFAVLVCYVLMARRLLKPAYGTSG-----GLPRAKRSVRT--- 245
QY 262 DHTGVPWPLHPLF-CALPYH-----SLLPHLLLSAFSGLPALDQSCGLQDME 309
DB 246 ----IAVLAVFALCFPLFHVTRTYYSFRSLDLSCHTLNAIN-----MAYKVTRLA 293
QY 310 ASGECEQLPQSPVLSFGKGNRVRLLOKLRONKLGHEHPA-GRKRCPLGNRS 360
DB 294 SANSC-----LDPVLYFLAGQLRVFARDAKP-PTGSPSPATPARRTLGLRRS 339

RESULT 13

US-08-446-088A-2
Sequence 2, Application US/08446088A
Patent No. 5691156
GENERAL INFORMATION:
APPLICANT: Boucher, Richard C.
APPLICANT: Weisman, Gary A.
APPLICANT: Turner, John T.
APPLICANT: Harden, Thomas K.
APPLICANT: Parr, Claude E.
APPLICANT: Sullivan, Daniel M.
APPLICANT: Erb, Laura
APPLICANT: Lustig, Kevin D.
TITLE OF INVENTION: DNA Encoding the Human P2U Receptor and
TITLE OF INVENTION: Null Cells Expressing P2U Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bell, Seltzer, Park & Gibson
STREET: Post Office Drawer 34009
CITY: Charlotte
STATE: No. 5691156th Carolina
COUNTRY: USA
ZIP: 28234
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/446.088A
FILING DATE: 19-MAY-1995

```
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kenneth D. Sibley
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5470-71C
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-420-2200
TELEFAX: 919-881-3175
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-446-088A-2

Query Match          19.3%  Score 374.5;  DB 1;  Length 375;
Best Local Similarity 32.7%;  Pred. No. 3.2e-25;
Matches 115;  Conservative 43;  Mismatches 123;  Indels 71;  Gaps 13;

QY  43  CQSEKYKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSGATTVLVNLMVADLLIYVL 102
DB  25  CRNEDFKYLLPVSYGVVCLNNAVLGIYIFCLRLKTNASTTYMFHLAVSDALYAA 84

QY  103  LPFLIITYSLDRWPFGEILCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPY 161
DB  85  SLPLLVYYARGDHPFSTVLCKLVRFVFLFYINLYCSILFLTCISVHRCGLGVLRPLSLRW 144

QY  162  RTRRHAWLGTSTTVALVQLLPTLAFSHTDYINGQMIWYDMTSQENFORLPAFYGLVLT 221
DB  85  SLPLLVYYARGDHPFSTVLCKLVRFVFLFYINLYCSILFLTCISVHRCGLGVLRPLSLRW 144

QY  145  GRARYARRVAGAVVVLACQAPVLYFVTTTS-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201
DB  222  SGFLSLLLGHFGVLF-----TDGQEPDQARGEHPEDRQHSQVHP 261

QY  202  ---LGLL---FAVPFAVILVCVLMARRLLKPAYGTSG-----GLPRAKRSVRT---- 245
DB  262  DHPTGVWPLHPLF--CALPYH-----SLLLPHLLSAFSGPLDGSQCGLODME 309

QY  246  -----IAVVLAVFALCFLPFVTRTYYSFRSLDLSCHTLNAIN-----MAYKVTRLA 293
DB  310  ASGECEQLPQPSVLSFKGKNRVRLQLKQNKLGHPA-GRKRCPCGLNRS 360

QY  294  SANSNC-----LDPVLYFLAGQLRVRFARDAKP-PTGPPSPATPARRTLGLRRS 339
DB

RESULT 14
US-08-559-524A-3
Sequence 3, Application US/08559524A
Patent No. 5871963
GENERAL INFORMATION:
APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
TITLE OF INVENTION: NOVEL PURINERGIC RECEPTOR
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN, LEWIS & BOCKIUS LLP
STREET: 1800 M Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20036-5869
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 15-NOV-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Adler, Reid G.
REGISTRATION NUMBER: 30,988

US-08-559-524A-3
Sequence 3, Application US/08749707
Patent No. 6063582
GENERAL INFORMATION:
APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
TITLE OF INVENTION: NOVEL PURINERGIC RECEPTOR
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN, LEWIS & BOCKIUS LLP
STREET: 1800 M Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20036-5869
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 15-NOV-1996
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Adler, Reid G.
REGISTRATION NUMBER: 30,988
REFERENCE/DOCKET NUMBER: 044481-5010-01-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-467-7000
```

```
REFERENCE/DOCKET NUMBER: 044481-5010-00-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-467-7000
TELEFAX: 202-467-7176
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 375 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-559-524A-3

Query Match          19.3%  Score 374.5;  DB 2;  Length 375;
Best Local Similarity 32.7%;  Pred. No. 3.2e-25;
Matches 115;  Conservative 43;  Mismatches 123;  Indels 71;  Gaps 13;

QY  43  CQSEKYKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSGATTVLVNLMVADLLIYVL 102
DB  25  CRNEDFKYLLPVSYGVVCLNNAVLGIYIFCLRLKTNASTTYMFHLAVSDALYAA 84

QY  103  LPFLIITYSLDRWPFGEILCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPY 161
DB  85  SLPLLVYYARGDHPFSTVLCKLVRFVFLFYINLYCSILFLTCISVHRCGLGVLRPLSLRW 144

QY  162  RTRRHAWLGTSTTVALVQLLPTLAFSHTDYINGQMIWYDMTSQENFORLPAFYGLVLT 221
DB  145  GRARYARRVAGAVVVLACQAPVLYFVTTTS-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201

QY  222  SGFLSLLLGHFGVLF-----TDGQEPDQARGEHPEDRQHSQVHP 261
DB  202  ---LGLL---FAVPFAVILVCVLMARRLLKPAYGTSG-----GLPRAKRSVRT---- 245

QY  262  DHPTGVWPLHPLF--CALPYH-----SLLLPHLLSAFSGPLDGSQCGLODME 309
DB  246  -----IAVVLAVFALCFLPFVTRTYYSFRSLDLSCHTLNAIN-----MAYKVTRLA 293

QY  310  ASGECEQLPQPSVLSFKGKNRVRLQLKQNKLGHPA-GRKRCPCGLNRS 360
DB  294  SANSNC-----LDPVLYFLAGQLRVRFARDAKP-PTGPPSPATPARRTLGLRRS 339

RESULT 15
US-08-749-707-3
Sequence 3, Application US/08749707
Patent No. 6063582
GENERAL INFORMATION:
APPLICANT: Conley, Pamela B.
APPLICANT: Jantzen, Hans-Michael
TITLE OF INVENTION: NOVEL PURINERGIC RECEPTOR
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN, LEWIS & BOCKIUS LLP
STREET: 1800 M Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20036-5869
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 15-NOV-1996
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Adler, Reid G.
REGISTRATION NUMBER: 30,988
REFERENCE/DOCKET NUMBER: 044481-5010-01-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-467-7000
```

```
; TELEFAX: 202-467-7176
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 375 amino acids
;   TYPE: amino acid
;   STRANDEDNESS:
;   TOPOLOGY: linear
;   MOLECULE TYPE: protein
;   US-08-749-707-3

Query Match      19.3%; Score 374.5; DB 3; Length 375;
Best Local Similarity 32.7%; Pred. No. 3.2e-25;
Matches 115; Conservative 43; Mismatches 123; Indels 71; Gaps 13;

QY 43 CQFSKXKQVLSLAYSIIIFILGLPLNGTVLWHSWGQTKRWSCATTYLVNLMVADLLYL 102
Db 25 CRNEDFKVLLPVSGVGVVCLCLNAVGLYIFLCRLKTNASTTTNFHLAVSDALYAA 84

QY 103 -LPFLIITYSLDDRPFGEELCKLVHFLFYINLYXSILLTLCISVHQFLGVCHLCSLPY 161
Db 85 SLPLLVYYVYARGDHPFFSTVLCKLVRFVLTNLYCSILFLCISVHRCGLGVLRPLRSLR 144

QY 162 RTRRHAWLGSTTVALVQLLPTLAFSHTDYINGOMIWDYMTSQENPDRLFAYGIVLT 221
Db 145 GRARYARRVAGAVWVVLVLAQAPVLYFVTTIS-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201

QY 222 SGFLSLLGHFGVLF-----TDGQEPDQARGEPEHEDRQHSFSQVHP 261
Db 202 ---LGLL--FAVPFAVILVCYVLMARRLLKPAYGTSG-----GLPRAKRSVRT---- 245

QY 262 DHPTGVWPEHFLF--CALPYH-----SLLPHLLSAFSGLPALDGSQCGLQDME 309
Db 246 -----IAVVLAVFALCFLPFHVTRTYYSFRSLDLSCHTLNAIN-----MAYKXVTRLA 293

QY 310 ASGECEQLPQSPSPVLSFKGKRVRLLOKLRQNLGHPA-GRKRCPCGLNRS 360
Db 294 SANSC-----LDPVLYFLAGQELVRFADAKP-PTGPPSPATPARTLGLRHS 339
```

Search completed: November 4, 2004, 17:02:01
Job time : 42 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: November 4, 2004, 16:54:39 ; Search time 141 Seconds

(without alignments)
901.853 Million cell updates/sec

Title: US-10-763-972-2

Perfect score: 1936

Sequence: 1 MSLTILPSRSGSRGAL.....QNLGHPAGKRCPLNRS 360

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1566620 seqs, 353225886 residues

Total number of hits satisfying chosen parameters: 1566620

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1936	100.0	360	14 US-10-023-586B-2	Sequence 2, Appli
2	1936	100.0	360	16 US-10-763-972-2	Sequence 2, Appli
3	1798	92.9	333	14 US-10-088-726-20	Sequence 20, Appl
4	1542	79.6	295	14 US-10-275-910-2	Sequence 2, Appli
5	1529	79.0	361	15 US-10-072-012-166	Sequence 166, App
6	1189	61.4	338	14 US-09-885-453-4	Sequence 4, Appli
7	1189	61.4	338	14 US-10-079-384-6	Sequence 6, Appli
8	1185	61.2	339	14 US-10-023-586B-4	Sequence 4, Appli
9	1185	61.2	339	15 US-10-333-946-1	Sequence 1, Appli
10	1185	61.2	339	16 US-10-763-972-4	Sequence 4, Appli
11	942	48.7	271	14 US-10-017-161-708	Sequence 708, App
12	942	48.7	271	14 US-10-292-798-620	Sequence 620, App
13	921	47.6	170	10 US-09-782-974C-14	Sequence 14, Appl

14	447	23.1	328	14	US-10-010-568-10	Sequence 10, Appl
15	447	23.1	328	14	US-10-010-568-14	Sequence 14, Appl
16	447	23.1	328	14	US-10-275-910-3	Sequence 3, Appli
17	447	23.1	328	14	US-10-375-157-10	Sequence 10, Appl
18	447	23.1	328	14	US-10-375-157-14	Sequence 14, Appl
19	447	23.1	328	15	US-10-072-012-519	Sequence 519, App
20	447	23.1	328	15	US-10-072-012-520	Sequence 520, App
21	421	21.7	374	10	US-09-745-842-15	Sequence 15, Appl
22	421	21.7	374	14	US-10-010-568-11	Sequence 11, Appl
23	421	21.7	374	14	US-10-375-157-11	Sequence 11, Appl
24	421	21.7	374	15	US-10-072-012-518	Sequence 518, App
25	416	21.5	537	14	US-10-311-956-4	Sequence 4, Appli
26	416	21.5	537	14	US-10-010-568-12	Sequence 12, Appl
27	416	21.5	537	14	US-10-375-157-12	Sequence 12, Appl
28	416	21.5	537	15	US-10-058-569A-52	Sequence 52, Appl
29	416	21.5	537	15	US-10-072-012-517	Sequence 517, App
30	395	20.4	328	14	US-10-278-087A-39	Sequence 39, Appl
31	392.5	20.3	328	14	US-10-278-087A-56	Sequence 56, Appl
32	388	20.0	361	10	US-09-964-821B-15	Sequence 15, Appl
33	388	20.0	361	14	US-10-010-568-9	Sequence 9, Appli
34	388	20.0	361	14	US-10-268-332-15	Sequence 15, Appl
35	388	20.0	361	14	US-10-375-157-9	Sequence 9, Appli
36	388	20.0	361	15	US-10-072-012-521	Sequence 521, App
37	388	20.0	361	17	US-10-775-965-15	Sequence 18, Appl
38	387.5	20.0	328	10	US-09-745-842-18	Sequence 18, Appl
39	387.5	20.0	328	14	US-10-225-567A-223	Sequence 223, App
40	387.5	20.0	328	14	US-10-354-358-10	Sequence 10, Appl
41	387.5	20.0	328	14	US-10-295-027-1288	Sequence 1288, Ap
42	387.5	20.0	377	10	US-09-745-842-17	Sequence 17, Appl
43	387.5	20.0	377	14	US-10-225-567A-217	Sequence 217, App
44	374.5	19.3	375	9	US-09-947-922-3	Sequence 3, Appli
45	374.5	19.3	375	16	US-10-706-532-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-10-023-586B-2
; Sequence 2, Application US/10023586B
; Publication No. US20030166882A1
; GENERAL INFORMATION:
; APPLICANT: Pfizer Ltd. (EP (GB) only)
; APPLICANT: Pfizer Inc. (US, JP, EP except GB)
; APPLICANT: Fidock, Mark David
; TITLE OF INVENTION: No. US20030166882A1el Polypeptide
; FILE REFERENCE: PC10960AGPR
; CURRENT APPLICATION NUMBER: US/10/023,586B
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: GB 0030855.1
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 60/260,563
; PRIOR FILING DATE: 2001-01-09
; PRIOR APPLICATION NUMBER: US 60/265,688
; PRIOR FILING DATE: 2001-02-01
; PRIOR APPLICATION NUMBER: GB 0101222.8
; PRIOR FILING DATE: 2001-01-17
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-023-586B-2

Query Match 100.0%; Score 1936; DB 14; Length 360;
Best Local Similarity 100.0%; Pred. No. 3.9e-176;
Matches 360; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Query 1 MSLTILPSRSGSRGALLEGARDKVEKVDNMTSQOGLCQFSEKVKQVYLAYS1 60
Db 1 MSLTILPSRSGSRGALLEGARDKVEKVDNMTSQOGLCQFSEKVKQVYLAYS1 60

QY 61 IFILGLPLNGTVLWHSWGQTKWSCATTYLVNLMVADLLVLLPFLIITYSLDDRWPFGE 120
DB 61 IFILGLPLNGTVLWHSWGQTKWSCATTYLVNLMVADLLVLLPFLIITYSLDDRWPFGE 120
QY 121 LLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPYTRRHAWLGSTTTWALVVL 180
DB 121 LLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPYTRRHAWLGSTTTWALVVL 180
QY 181 QLLPTLAFSHDTHYINGQMIWYDMTSENEDRLFAFGIVLTLSGFLSLGHHFGVLTDCQE 240
DB 181 QLLPTLAFSHDTHYINGQMIWYDMTSENEDRLFAFGIVLTLSGFLSLGHHFGVLTDCQE 240
QY 241 PDQARPEHEDRQHSQVHPDPTGWPPLHPLFCALPYHSLLLPHLLSAPSGLPALDG 300
DB 241 PDQARPEHEDRQHSQVHPDPTGWPPLHPLFCALPYHSLLLPHLLSAPSGLPALDG 300
QY 301 SQCGLODMEASGECEQLPQSPVLSFKGKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 360
DB 301 SQCGLODMEASGECEQLPQSPVLSFKGKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 360

RESULT 2

US-10-763-972-2
; Sequence 2, Application US/10763972
; Publication No. US20040137500A1
; GENERAL INFORMATION:
; APPLICANT: PFIZER INC.
; APPLICANT: FIDCOCK, Mark David
; TITLE OF INVENTION: Novel Polypeptide
; FILE REFERENCE: PC10960B
; CURRENT APPLICATION NUMBER: US/10/763,972
; CURRENT FILING DATE: 2004-01-23
; PRIOR APPLICATION NUMBER: GB 0030855.1
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 60/260,563
; PRIOR FILING DATE: 2001-01-09
; PRIOR APPLICATION NUMBER: US 60/265,688
; PRIOR FILING DATE: 2001-02-01
; PRIOR APPLICATION NUMBER: GB 0101222.8
; PRIOR FILING DATE: 2001-01-17
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-763-972-2

Query Match 100.0%; Score 1936; DB 16; Length 360;
Best Local Similarity 100.0%; Pred. No. 3.9e-176;
Matches 360; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MSLILLPSRSGSRGRRGALLLEGASRDMEKVDMMTSQEQGLCOFSEKQKQVLSLAYSI 60
DB 1 MSLILLPSRSGSRGRRGALLLEGASRDMEKVDMMTSQEQGLCOFSEKQKQVLSLAYSI 60
QY 61 IFILGLPLNGTVLWHSWGQTKWSCATTYLVNLMVADLLVLLPFLIITYSLDDRWPFGE 120
DB 61 IFILGLPLNGTVLWHSWGQTKWSCATTYLVNLMVADLLVLLPFLIITYSLDDRWPFGE 120
QY 121 LLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPYTRRHAWLGSTTTWALVVL 180
DB 121 LLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSLPYTRRHAWLGSTTTWALVVL 180
QY 181 QLLPTLAFSHDTHYINGQMIWYDMTSENEDRLFAFGIVLTLSGFLSLGHHFGVLTDCQE 240
DB 181 QLLPTLAFSHDTHYINGQMIWYDMTSENEDRLFAFGIVLTLSGFLSLGHHFGVLTDCQE 240
QY 241 PDQARPEHEDRQHSQVHPDPTGWPPLHPLFCALPYHSLLLPHLLSAPSGLPALDG 300
DB 241 PDQARPEHEDRQHSQVHPDPTGWPPLHPLFCALPYHSLLLPHLLSAPSGLPALDG 300
QY 301 SQCGLODMEASGECEQLPQSPVLSFKGKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 360

DB 301 SQCGLODMEASGECEQLPQSPVLSFKGKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 360
RESULT 3
US-10-088-726-20
; Sequence 20, Application US/10088726
; Publication No. US20030157559A1
; GENERAL INFORMATION:
; APPLICANT: Matsumoto et al.
; TITLE OF INVENTION: NOVEL GUANOSINE TRIPHOSPHATE-BINDING PROTEIN-COUPLED RECEPTORS AND
; TITLE OF INVENTION: THEREOF, AND PRODUCTION AND USES THEREOF
; FILE REFERENCE: 62514
; CURRENT APPLICATION NUMBER: US/10/088,726
; CURRENT FILING DATE: 2002-03-22
; PRIOR APPLICATION NUMBER: PCT/JP00/09408
; PRIOR FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: JP 1999-375152
; PRIOR FILING DATE: 1999-12-28
; PRIOR APPLICATION NUMBER: JP 2000-101339
; PRIOR FILING DATE: 2000-03-31
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 20
; LENGTH: 333
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-088-726-20

Query Match 92.9%; Score 1798; DB 14; Length 333;
Best Local Similarity 99.7%; Pred. No. 5.4e-163;
Matches 331; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 29 MEKVDMMTSQEQGLCOFSEKQKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKWSCATT 88
DB 1 MEKVDMMTSQEQGLCOFSEKQKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKWSCATT 60
QY 89 YLVNLMVADLLVLLPFLIITYSLDDRWPFGECLLVHFLFYINLYGSIILLTICISVHQ 148
DB 61 YLVNLMVADLLVLLPFLIITYSLDDRWPFGECLLVHFLFYINLYGSIILLTICISVHQ 120
QY 149 FLGVCHPLCSLPYTRRHAWLGSTTTWALVVLQLLPTLAFSHDTHYINGQMIWYDMTSEN 208
DB 121 FLGVCHPLCSLPYTRRHAWLGSTTTWALVVLQLLPTLAFSHDTHYINGQMIWYDMTSEN 180
QY 209 FDRLFAYGIVLTLSGFLSLGHHFGVLTDCQEQPDQARPEHEDRQHSQVHPDPTGVM 268
DB 181 FDRLFAYGIVLTLSGFLSLGHHFGVLTDCQEQPDQARPEHEDRQHSQVHPDPTGVM 240
QY 269 PLHPLFCALPYHSLLLPHLLSAPSGLPALDGSCQGLQDMEASGECEQLPQSPVLSFKG 328
DB 241 PLHPLFCALPYHSLLLPHLLSAPSGLPALDGSCQGLQDMEASGECEQLPQSPVLSFKG 300
QY 329 GKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 360
DB 301 GKGNRVLQLKRNKLGHEHPAGRCRCFGLNRS 332

RESULT 4

US-10-275-910-2
; Sequence 2, Application US/10275910
; Publication No. US20030166142A1
; GENERAL INFORMATION:
; APPLICANT: Ramakrishnan, Shyam
; TITLE OF INVENTION: REGULATION OF HUMAN P2Y-LIKE G PROTEIN-COUPLED RECEPTOR
; FILE REFERENCE: 4974.00885
; CURRENT APPLICATION NUMBER: US/10/275,910
; CURRENT FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: US 60/203,582
; PRIOR FILING DATE: 2000-05-11
; PRIOR APPLICATION NUMBER: US 60/269,857
; PRIOR FILING DATE: 2001-02-21
; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 295
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-275-910-2

Query Match 79.6%; Score 1542; DB 14; Length 295;
Best Local Similarity 99.6%; Pred. No. 1.3e-138;
Matches 284; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 29 MEKVDNMTSQEGLCPSEKQVYLSLAYSIIFILGLPLNGTVLHWSGQTKRWCATT 88
Db 1 MEKVDNMTSQEGLCPSEKQVYLSLAYSIIFILGLPLNGTVLHWSGQTKRWCATT 60
QY 89 YLVNLMVADLLVLLPELIITYSLDDRWPFGLLCKLVHFLFYINLYGSIILLTCTISVHQ 148
Db 61 YLVNLMVADLLVLLPELIITYSLDDRWPFGLLCKLVHFLFYINLYGSIILLTCTISVHQ 120
QY 149 FLGVCHPLCSLPYTRRHAWLGTSTTVALVVLQLLPTLAFSHDTYINGQMIWYDMTSQEN 208
Db 121 FLGVCHPLCSLPYTRRHAWLGTSTTVALVVLQLLPTLAFSHDTYINGQMIWYDMTSQEN 180
QY 209 FDRLFAYGIVLTLSGFLSLGLGHFVLTGQEPDQARGEPEHEDRQHSQVHPDHTGVM 268
Db 181 FDRLFAYGIVLTLSGFLSLGLGHFVLTGQEPDQARGEPEHEDRQHSQVHPDHTGVM 240
QY 269 PLHFLFCALPYHSLLLPHHLLSAPSGLPALDGSQGLQDMWASGECEQ 316
Db 241 PLHFLFCALPYHSLLLPHHLLSAPSGLPALDGSQGLQDMWASGECEQ 288

RESULT 5

US-10-072-012-166
; Sequence 166; Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
; APPLICANT: Tchernev, Velizar
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zettusen, Bryan
; APPLICANT: Patturajan, Meera
; APPLICANT: Shinkets, Richard
; APPLICANT: Li, Li
; APPLICANT: Gangolli, Esha
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Anderson, David W.
; APPLICANT: Rastelli, Luca
; APPLICANT: Miller, Charles E.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Taupier Jr, Raymond J.
; APPLICANT: Gusev, Vladimir Y.
; APPLICANT: Colman, Steven D.
; APPLICANT: Wolenc, Adam R.
; APPLICANT: Pena, Carol E. A
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Grosse, William M.
; APPLICANT: Alsobrook II, John P.
; APPLICANT: Lepley, Denise M.
; APPLICANT: Rieger, Daniel K.
; APPLICANT: Burgess, Catherine E.
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-258
; CURRENT APPLICATION NUMBER: US/10/072,012
; CURRENT FILING DATE: 2002-01-31
; PRIOR APPLICATION NUMBER: 60/265,102
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: 60/265,514
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,517
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,412
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,395

; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/266,406
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 60/266,767
; PRIOR FILING DATE: 2001-02-05
; PRIOR APPLICATION NUMBER: 60/267,057
; PRIOR FILING DATE: 2001-02-07
; PRIOR APPLICATION NUMBER: 60/266,975
; PRIOR FILING DATE: 2001-02-07
; PRIOR APPLICATION NUMBER: 60/267,459
; PRIOR FILING DATE: 2001-02-08
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1391
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 166
; LENGTH: 361
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-166

Query Match 79.0%; Score 1529; DB 15; Length 361;

Best Local Similarity 82.6%; Pred. No. 2.9e-137;
Matches 303; Conservative 11; Mismatches 39; Indels 14; Gaps 5;
QY 1 MLSILLPGRSGSRGALLLEGASRDMEKVDNMTSQEGLCPSEKQVYLSLAYSI 60
Db 1 MLSILLPGRSGSRGALLLEGASRDMEKVDNMTSQEGLCPSEKQVYLSLAYSI 60
QY 61 IFILGLPLNGTVLHWSGQTKRWCATTYLVNLMVADLLVLLPELIITYSLDDRWPFGE 120
Db 61 IFILGLPLNGTVLHWSGQTKRWCATTYLVNLMVADLLVLLPELIITYSLDDRWPFGE 120
QY 121 LLCKLVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYTRRHAWLGTSTTVALVVL 180
Db 121 LLCKLVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYTRRHAWLGTSTTVALVVL 180
QY 181 QLLPTLAFSHDTYINGQMIWYDMTSQENPDRFLFAIGIVLTLSGFLSLGLGHFVLTGQGE 240
Db 181 QLLPTLAFSHDTYINGQMIWYDMTSQENPDRFLFAIGIVLTLSGFLSLGLGHFVLTGQGE 236
QY 241 PQARG--EPHEDRQHSQVHPDHTGVMPLHPLF--CALPHYHSLLLPHHLLSAP---S 293
Db 237 --MVRSLKPEENLMTGTNTARARSIRTILLVCGFLTLCFVFFH-ITRSFYLTICFLLSQ 293
QY 294 GLPALDGSQGLQDMWASGECEQLPQSPVLSFKGKKNRVLRLQKLQKLGHPAGRK 353
Db 294 DCQLLMAAQGLQDMWASGECEQLPQSPVLSFKGKKNRVLRLQKLQKLGHPAGRK 353
QY 354 CPGLNRS 360
Db 354 CPGLNRS 360

RESULT 6

US-09-885-453-4
; Sequence 4; Application US/09885453
; Publication No. US2003008080A1
; GENERAL INFORMATION:
; APPLICANT: Communi, Didier
; TITLE OF INVENTION: RECEPTOR GPCRx10
; FILE REFERENCE: 9409/2082
; CURRENT APPLICATION NUMBER: US/09/885,453
; CURRENT FILING DATE: 2001-06-20
; PRIOR APPLICATION NUMBER: US 09/885,453
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 338
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: Amino acid sequence

```

; LOCATION: (1)..(338)
; OTHER INFORMATION: GPCRxb6 amino acid sequence
US-09-885-453-4

Query Match
Best Local Similarity 61.4%; Score 1189; DB 10; Length 338;
Matches 225; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
DB 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
QY 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
DB 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
QY 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
DB 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
QY 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLSL 228
DB 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLSL 228

RESULT 7
US-10-079-384-6
; Sequence 6, Application US/10079384
; Publication No. US2003010896A1
; GENERAL INFORMATION:
; APPLICANT: Communi, Didier
; TITLE OF INVENTION: COMPOSITIONS AND METHODS COMPRISING G-PROTEIN COUPLED RECEPTORS
; FILE REFERENCE: 9409/2132
; CURRENT APPLICATION NUMBER: US/10/079,384
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: US 09/885,453
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 6
; LENGTH: 338
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-079-384-6

Query Match
Best Local Similarity 61.4%; Score 1189; DB 14; Length 338;
Matches 225; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
DB 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
QY 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
DB 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
QY 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
DB 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
QY 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLSL 228
DB 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLSL 228

RESULT 8
US-10-023-586B-4
; Sequence 4, Application US/10023586B
; Publication No. US20030166882A1
; GENERAL INFORMATION:
; APPLICANT: Pfizer Ltd. (EP (GB) only)
; APPLICANT: Pfizer Inc. (US, JP, EP except GB)

```

```

; APPLICANT: Fidock, Mark David
; TITLE OF INVENTION: No. US20030166882A1 Polypeptide
; FILE REFERENCE: PC10960AGPR
; CURRENT APPLICATION NUMBER: US/10/023,586B
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: GB 0030855.1
; PRIOR FILING DATE: 2000-12-18
; PRIOR APPLICATION NUMBER: US 60/260,563
; PRIOR FILING DATE: 2001-01-09
; PRIOR APPLICATION NUMBER: US 60/265,688
; PRIOR FILING DATE: 2001-02-01
; PRIOR APPLICATION NUMBER: GB 0101222.8
; PRIOR FILING DATE: 2001-01-17
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 4
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-023-586B-4

Query Match
Best Local Similarity 61.2%; Score 1185; DB 14; Length 339;
Matches 225; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
DB 1 MSLILLPSRSGSRGALLLEGASRDMEKVDMTSQEGLCFQSEKQKVYLSLAYSI 60
QY 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
DB 61 IFILGLPLNGTVLHWSGQTKWSCATTYLVNLMVADLLYVLLPFLIITYSLDDRPFGE 120
QY 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
DB 121 LKCLVHFLFYINLYGSIILLTCTISVHQFLGCHPLCSLPYRTRHAWLGSTTTWALVVL 180
QY 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLS 226
DB 181 QLLPTLAFSHDTYINGQMIWYDMTQENFDRLFYAGIVLTLSGFLS 226

RESULT 9
US-10-333-946-1
; Sequence 1, Application US/10333946
; Publication No. US20040023252A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.; THORNTON, Michael B.
; APPLICANT: ARVIZU, Chandra S.; LAL, Preeti G.
; APPLICANT: BURFORD, Neil; YUE, Henry
; APPLICANT: GANDHI, Ameena R.; ELLIOTT, Vicki S.
; APPLICANT: RAMKUMAR, Jayalaxmi; BAUGHN, Mariah R.
; APPLICANT: KALLICK, Deborah A.; CHAWLA, Narinder K.
; APPLICANT: HAPALIA, April J.A.; YAO, Monique G.
; APPLICANT: LU, Yan; TRIBOULEY, Catherine M.
; APPLICANT: POLICKY, Jennifer L.; KEARNEY, Liam
; APPLICANT: GRAUB, Richard C.; WARREN, Bridget A.
; APPLICANT: LEE, Ernestine A.; DING, Li
; TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTORS
; FILE REFERENCE: PI-0176 USN
; CURRENT APPLICATION NUMBER: US/10/333,946
; CURRENT FILING DATE: 2003-01-22
; PRIOR APPLICATION NUMBER: PCT/US01/23433
; PRIOR FILING DATE: 2001-07-25
; PRIOR APPLICATION NUMBER: US 60/221,478
; PRIOR FILING DATE: 2000-07-27
; PRIOR APPLICATION NUMBER: US 60/223,268
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: US 60/227,054
; PRIOR FILING DATE: 2000-08-21
; PRIOR APPLICATION NUMBER: US 60/231,121
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/232,243

```


NUMBER OF SEQ ID NOS: 2070
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 620
LENGTH: 271
TYPE: PRT
ORGANISM: Homo sapiens
US-10-292-798-620

Query Match 48.7%; Score 942; DB 14; Length 271;
Best Local Similarity 86.5%; Pred. No. 2.4e-81;
Matches 179; Conservative 6; Mismatches 22; Indels 0; Gaps 0;
QY 29 MEKVDNWSQEQGLQFSEKYKQVYLSLAYSIIFILGPIGTVLWHSWGQTKWSCATT 88
DB 1 MEKVDNWSQEQGLQFSEKYKQVYLSLAYSIIFILGPIGTVLWHSWGQTKWSCATT 60
QY 89 YLVNLMVADLLVLLPFIITYSLDDRWPFGBELLCKLVHFLFYINLYGSIILLTICISVHQ 148
DB 61 YLVNLMVADLLVLLPFIITYSLDDRWPFGBELLCKLVHFLFYINLYGSIILLTICISVHQ 120
QY 149 FLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQMIWYDMTSQEN 208
DB 121 FLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQMIWYDMTSQEN 180
QY 209 FDRFLAYGIVLTLSGFLSLGHFGVLF 235
DB 181 LMRGTARARSIRILLVCGFLTLCF 207

RESULT 13

US-09-782-974C-14
Sequence 14, Application US/09782974C
Publication No. US20030082534A1
GENERAL INFORMATION:

APPLICANT: Vogel, Gabriel
APPLICANT: Lind, Peter
APPLICANT: Wood, Linda S.
APPLICANT: Parodi, Luis A.
TITLE OF INVENTION: No. US20030082534A1el G Protein Coupled Receptor
FILE REFERENCE: 41USPHRM311
CURRENT APPLICATION NUMBER: US/09/782,974C
CURRENT FILING DATE: 2002-09-04
PRIOR APPLICATION NUMBER: 60/165,838
PRIOR FILING DATE: 1999-11-16
PRIOR APPLICATION NUMBER: 09/714,449
PRIOR FILING DATE: 2000-11-16
PRIOR APPLICATION NUMBER: 60/198,568
PRIOR FILING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: 60/166,071
PRIOR FILING DATE: 1999-11-17
PRIOR APPLICATION NUMBER: 60/166,678
PRIOR FILING DATE: 1999-11-19
PRIOR APPLICATION NUMBER: 60/173,396
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: 60/184,129
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: 60/185,421
PRIOR FILING DATE: 2000-02-28
PRIOR APPLICATION NUMBER: 60/185,554
PRIOR FILING DATE: 2000-02-28
PRIOR APPLICATION NUMBER: 60/186,530
PRIOR FILING DATE: 2000-03-02

Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 192
SOFTWARE: PatentIn version 3.1
SEQ ID NO 14

LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
US-09-782-974C-14

Query Match 47.6%; Score 921; DB 10; Length 170;
Best Local Similarity 100.0%; Pred. No. 1.3e-79;

Matches 170; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 83 WSCATTYLVNLMVADLLVLLPFIITYSLDDRWPFGBELLCKLVHFLFYINLYGSIILLT 142
DB 1 WSCATTYLVNLMVADLLVLLPFIITYSLDDRWPFGBELLCKLVHFLFYINLYGSIILLT 60
QY 143 CISVHQFLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQMIWYD 202
DB 61 CISVHQFLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQMIWYD 120
QY 203 MTSQENFDSLFAFGIVLTLSGFLSLGHFGVLTDCQBPDAQRGPHEDR 252
DB 121 MTSQENFDSLFAFGIVLTLSGFLSLGHFGVLTDCQBPDAQRGPHEDR 170

RESULT 14

US-10-010-568-10
Sequence 10, Application US/10010568
Publication No. US20030157598A1
GENERAL INFORMATION:

APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR, HGPBMY23, EXPRESSED HIC
FILE REFERENCE: D0077 NP
CURRENT APPLICATION NUMBER: US/10/010,568
CURRENT FILING DATE: 2001-12-07
PRIOR APPLICATION NUMBER: US 60/251,926
PRIOR FILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/269,795
PRIOR FILING DATE: 2001-02-14
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PatentIn version 3.0
SEQ ID NO 10
LENGTH: 328
TYPE: PRT
ORGANISM: homo sapiens
US-10-010-568-10

Query Match 23.1%; Score 447; DB 14; Length 328;
Best Local Similarity 45.9%; Pred. No. 5.7e-34;
Matches 85; Conservative 31; Mismatches 67; Indels 2; Gaps 2;

QY 43 QPSEKRYKQVYLSLAYSIIFILGPIGTVLWHSWGQTKWSCATTYLVNLMVADLLVYL 102
DB 13 CTPEEFKQVLLPFLVYVSVVFLGLPLNAVIGQIWLARKALTRTIYMLNLAMADLLVYC 72
QY 103 -LPFLIITYSLDDRWPFGBELLCKLVHFLFYINLYGSIILLTICISVHQFLGVCHPLCSL-P 160
DB 73 SLPLIYNTQKDYWPFGBFTCKFVRFOYTNLHGSILLELTICISVQRYMGICHPPLASWHK 132
QY 161 YRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQMIWYDMTSQENPDRFLFAFGIVLT 220
DB 133 KKGKLTWLVCAAVWFIVIAQCLPTFVFASTGTQRNRTVCYDLSPPDRSTSYFPYGITLT 192
QY 221 LSCFL 225
DB 193 ITGFL 197

RESULT 15

US-10-010-568-14
Sequence 14, Application US/10010568
Publication No. US20030157598A1
GENERAL INFORMATION:

APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR, HGPBMY23, EXPRESSED HIC
FILE REFERENCE: D0077 NP
CURRENT APPLICATION NUMBER: US/10/010,568
CURRENT FILING DATE: 2001-12-07
PRIOR APPLICATION NUMBER: US 60/251,926
PRIOR FILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: US 60/269,795

; PRIOR FILING DATE: 2001-02-14
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
; LENGTH: 328
; TYPE: PRT
; ORGANISM: GALLUS GALLUS
US-10-010-568-14

Query Match	23.1%	Score 447;	DB 14;	Length 328;
Best Local Similarity	45.9%	Pred. No. 5.7e-34;		
Matches	85;	Conservative 31;	Mismatches 67;	Indels 2; Gaps 2;

QY	43	CQFSEKYKQVYLSLAYSIIFHILGDLPLNGTVLWHSWGQTKWSCATYLYNLWADLLIYVL	102
Db	13	CTPHEEFKQVLLFLVYSWVELLGLPLNAVVGQIWLARKALTETTYMLNLAMADLLIYVC	72
QY	103	-LPLIITYSLDDRWPFGELLCKLVHFLFYINLYGSILLITCISVHQFLGVCHPLCSL-P	160
Db	73	SLPILLIYNTQKDYWPGDFTCKEVRFOFYTNLHGSILFLTCISVORYWGIChPLASWHK	132
QY	161	YRTRRHAWLGTSTTVALVQLPTLAFSHTDYINGQMIWYDMSOENEDRLPAYGIVLT	220
Db	133	KKGKGLTWLVCAAWFTIVIAQCLPTFVFASGTQRNRTVCYDLSPPDRSTSYPPYGITLT	192
QY	221	LSGFL	225
Db	193	ITGFL	197

Search completed: November 4, 2004, 17:04:28
Job time : 143 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: November 4, 2004, 16:43:39 ; Search time 40 Seconds
(without alignments)
865.951 Million cell updates/sec

Title: US-10-763-972-2
Perfect score: 1936
Sequence: 1 MLSTLLPSRSGSRGAL.....QNKLGHPAGKRCPLGNRS 360

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_79:.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	400	20.7	328	2 I55450	G protein-coupled
2	387.5	20.0	328	2 Jc4800	p2y6 receptor - hu
3	374.5	19.3	375	2 A54946	p-2U nucleotide re
4	371	19.2	373	2 A47556	Atp receptor P2u -
5	367	19.0	365	2 S68679	G protein-coupled
6	346	17.9	362	2 S37333	G protein-coupled
7	328	16.9	373	2 Jc4737	G protein-coupled
8	326.5	16.9	373	2 Jc4162	P2y receptor - bov
9	282.5	14.6	308	2 I50241	G protein-coupled
10	274.5	14.2	344	2 T09508	intron 17 purinerg
11	258.5	13.4	370	2 Jc5549	heptahelical P2y5-
12	258	13.3	353	2 Jc2492	G protein-coupled
13	248.5	12.8	391	2 A41795	somatostatin recep
14	247.5	12.8	359	2 S15403	angiotensin II rec
15	246	12.7	399	2 I48705	proteinase activat
16	245.5	12.7	391	2 A39297	somatostatin recep
17	244.5	12.6	359	2 S44425	angiotensin II rec
18	244.5	12.6	391	2 C41795	somatostatin recep
19	242.5	12.5	397	2 S66518	proteinase-activat
20	242	12.5	359	2 Jc1104	angiotensin II rec
21	241.5	12.5	420	2 I51667	thrombin receptor
22	239	12.3	359	2 I39418	angiotensin II rec
23	238	12.3	359	2 A48857	angiotensin II rec
24	237.5	12.3	359	2 A42656	angiotensin II rec
25	237	12.2	359	2 JH0621	angiotensin II rec
26	237	12.2	359	2 Jc2134	angiotensin II rec
27	234.5	12.1	354	2 I30333	G protein-coupled
28	234.5	12.1	362	2 S68207	G protein-coupled
29	234.5	12.1	362	2 A57641	G protein-coupled

30	231.5	12.0	423	2 Jc7677	allatostatin recep
31	230.5	11.9	359	2 Jc1194	angiotensin II rec
32	230.5	11.9	362	2 B57641	G protein-coupled
33	230	11.9	352	1 S27357	complement C5a ana
34	229	11.8	360	2 Jc4587	chemokine (C-C) re
35	227	11.7	371	2 Jc5498	G protein-coupled
36	226.5	11.7	359	2 JQ1516	angiotensin II rec
37	226.5	11.7	425	2 A37912	thrombin receptor
38	225.5	11.6	372	2 S26667	G protein-coupled
39	224.5	11.6	380	2 I38435	angiotensin recep
40	223	11.5	365	2 S68208	G protein-coupled
41	221	11.4	371	2 Jc5796	probable chemotatr
42	221	11.4	398	2 I56504	mu opioid receptor
43	220.5	11.4	351	2 B42009	FMuP-related recep
44	220	11.4	398	2 A57510	mu opioid receptor
45	220	11.4	398	2 I56517	mu opioid receptor

ALIGNMENTS

RESULT 1

I55450
G protein-coupled P2 receptor - rat
C/Species: Rattus norvegicus (Norway rat)
C/Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C/Accession: I55450
R/Chang, K.; Hanaoka, K.; Kumada, M.; Takuwa, Y.
J. Biol. Chem. 270, 26152-26158, 1995

A/Title: Molecular cloning and functional analysis of a novel P2 nucleotide receptor.
A/Reference number: I55450; MUID:96064682; PMID:7592819.
A/Accession: I55450
A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: mRNA
A/Residues: 1-328 <RES>
A/Cross-references: UNIPROT:Q63371; GB:D63665; NID:gl0665007; PIDN:BA09816.1; PID:gl066501
C/Superfamily: ATP receptor P2u
C/Keywords: G protein-coupled receptor

Query Match 20.7%; Score 400; DB 2; Length 328;
Best Local Similarity 32.5%; Pred. No. 2.3e-27;
Matches 108; Conservative 53; Mismatches 137; Indels 34; Gaps 9;

Qy	29	MEKVDNNTSQEQGL-----CQFSEKYNQVYLSLAYSIIIFILPLNGTVLWHSWGQTKRWS	84
Db	1	MER-DNGTTIQAQGLPPTTCVREDPKRLLPVYSVVLVGLPLNVCVIAQICASRTILT	59
Qy	85	CATTYLVNLMVADLLVVL-LPELIITYSLDDRWPFGEELCKLVHFLFYINLYGSILLTTC	143
Db	60	RSAVYTNLALADLLYACSLPILLIYNYARGDHPFGDLACRLVRFLEYANLHGSILFLTC	119
Qy	144	ISVHQFLGVCHPLCSLPYR-TRHAWLGTSTTVALVVLQLLFTLAFSHTDYINGQMIVWD	202
Db	120	ISFQYLGICHPLAPWHKGGRRAAWVCGVVMVVTAAQCLPTAFAATGIGQRNRTVCYD	179
Qy	203	MTSQENFDRLFAYGIVLTLSGL-----SLIHFGVLFTDQEPDQARGEPHEDRQHSPO	258
Db	180	LSPILLSTLYLPYGMALTIVIGFLPPTALLACYCRMARLRCQDGPAGVAGERRSKAAR	239
Qy	259	VHPDHPGTVMPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQCGLQDMFASGEQOL	317
Db	240	M-----AVVVAAVFVISFLPFHITXTAYLAVRSTPGVSCPVLETFAAAYKGR	287
Qy	318	PQPS-----PVLSF-----KGGKNRVRLLOKL	339
Db	288	PFASANSVLDPILFYFTQOKFRFRQPHDLLOKL	319

RESULT 2

Jc4800

P2y6 receptor - human

C/Species: Homo sapiens (man)

C/Date: 15-Oct-1995 #sequence_revision 16-Aug-1996 #text_change 09-Jul-2004

C;Accession: J4800; G02514
R;Communi, D.; Parmentier, M.; Boeynaems, J.M.
Biochem. Biophys. Res. Commun. 222, 303-308, 1996
A;Title: Cloning, functional expression and tissue distribution of the human P2Y6 receptor
A;Reference number: J4800; MUID:96222498; PMID:8670200
A;Accession: J4800
A;Molecule type: mRNA
A;Residues: 1-328 <COM>
A;Cross-references: UNIPROT:Q15077; EMBL:X97058
R;Hammet, F.; Southey, M.C.; Somers, G.R.; Hutchins, A.M.; Venter, D.J.
submitted to the EMBL Data Library, March 1996
A;Reference number: H01373
A;Accession: G02514
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 'M', 4-328 <HAM>
A;Cross-references: EMBL:U52464; NID:g1407632; PIDN:AAB03572.1; PID:g1407633
C;Genetics:
A;Gene: P2Y6
C;Superfamily: ATP receptor P2u
C;Keywords: glycoprotein; placenta; receptor; transmembrane protein
F;26-52/Domain: transmembrane #status predicted <TM1>
F;63-86/Domain: transmembrane #status predicted <TM2>
F;104-122/Domain: transmembrane #status predicted <TM3>
F;143-167/Domain: transmembrane #status predicted <TM4>
F;193-216/Domain: transmembrane #status predicted <TM5>
F;241-264/Domain: transmembrane #status predicted <TM6>
F;283-305/Domain: transmembrane #status predicted <TM7>
F;5,173/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 20.0%; Score 387.5; DB 2; Length 328;
Best Local Similarity 32.7%; Pred. No. 2.8e-26;
Matches 108; Conservative 42; Mismatches 143; Indels 37; Gaps 9;
QY 33 DMNTSQEQL-----CFSEKRYQVLSLAYSIIFILGLPLNGTVLHWSWGQTKRWSCATT 88
DB 4 DNGTQALGLPTTCVYRENFRQLLPVYSVAALAGLPNICVITQICSTRALTRTAV 63
QY 89 YLVNLMVADLLYL-LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSIILLITCISVH 147
DB 64 YTLNALADLLVACSLPLIYNAQGDHWPFGDFACRLVFLFYANLHGSILFLTCISFQ 123
QY 148 QFLGVCHPLCPLPYR-TRRHAWLGTSTTVALVQLLPTLAFSHDYINGOMIWDMTSQ 206
DB 124 RYLGICHPLAPHKRGGRRAALVCVAVLAVTTQCLPTAIFANTGIQRNIVCYDLSP 183
QY 207 ENFDRLFYAGIVLTLSGFL-----SLHGFGVLFTDQGPDDQARGPHEDRQHSQVHPD 262
DB 184 ALATHYMPYGMALTIVIGFLPFAALLACCYLLAC-----RLCRQDGAEPVAQ 231
QY 263 HFTGVNPLHPLFCALPYHSLLLPHLL-SAPGSLPAGDSOGLQDMASGECEQLPOP- 320
DB 232 ERGKAARNAVVAAPALSFILPHTITAYLAVRSTGVPCV--LEAFAPAAKGTIRPF 289
QY 321 -----SPVLSF-----XGKQNRVLLQKL 339
DB 290 ASANSVLDPILFVFTQKPRRPHELLQKL 319

RESULT 3
A54946
P-2U nucleotide receptor - human
C;Species: Homo sapiens (man)
C;Date: 11-Nov-1994 #sequence_revision 11-Nov-1994 #text_change 17-Mar-1999
C;Accession: A54946
R;Parr, C.E.; Sullivan, D.M.; Paradiso, A.M.; Lazarowski, E.R.; Burch, L.H.; Olsen, J.C.
Proc. Natl. Acad. Sci. U.S.A. 91, 3275-3279, 1994
A;Title: Cloning and expression of a human P-2U nucleotide receptor, a target for cystic
A;Reference number: A54946; MUID:94211846; PMID:8159738
A;Accession: A54946
A;Status: preliminary
A;Molecule type: mRNA; protein

A;Residues: 1-375 <PAR>
A;Cross-references: GB:U07225
A;Note: parts of this sequence were confirmed by protein sequencing
C;Genetics:
A;Gene: GDB:P2RY2; HP2U; P2U
A;Cross-references: GDB:362713; OMIM:600041
A;Map position: 11q13.5-11q14.1
C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor; transmembrane protein

Query Match 19.3%; Score 374.5; DB 2; Length 375;
Best Local Similarity 32.7%; Pred. No. 4.5e-25;
Matches 115; Conservative 43; Mismatches 123; Indels 71; Gaps 13;
QY 43 CQSEKRYQVLSLAYSIIFILGLPLNGTVLHWSWGQTKRWSCATTYLVNLMVADLLYL 102
DB 25 CRNEDFKYLLPVSYGVCVGLCLNAVGLYIFLCRLKTNASTTTFMFLAVSDALYAA 84
QY 103 -LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSIILLITCISVHQLGVCHPLCSPY 161
DB 85 SLPLLYVYARGDHWPFSTVLCVLRFLFYNDYCSILFLTCISVHRCVGLVLRPLSLRW 144
QY 162 RTRRHAWLGTSTTVALVQLLPTLAFSHDYINGOMIWDMTSQENFDRLFYAGIVLT 221
DB 145 GRARYARRVAGAVVWLVLACQAPVLYFVTT-ARGPLTCHDTSAPELFSRFVAYSSVM-- 201
QY 222 SGFLSLLGHFGVLF-----TDGQEPDQARGPHEDRQHSQVHP 261
DB 202 ---LGULL--FAVFAVILVYVLMARRLLKPAYTSG-----GLPRAKRSVRT---- 245
QY 262 DHTGVNPLHPLF--CALPYH-----SLLPHLLSAPGSLPAGDSOGLQDM 309
DB 246 -----TAVLAVPALCFPHVTRTYYSFRSLDLSCHTLNAIN-----MAYKVTRLA 293
QY 310 ASGECQLPOPSPVLSFGKGNRVRLLQKLRQNLGHEPA-GRKRCPCGNRS 360
DB 294 SANSC-----LDEVLYFLAGQRLVRFARDAKP-PTGPSATPARRTLGLRS 339

RESULT 4
A47556
ATP receptor P2u - mouse
C;Species: Mus musculus (house mouse)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C;Accession: A47556
R;Lustig, K.D.; Shiau, A.K.; Brake, A.J.; Julius, D.
Proc. Natl. Acad. Sci. U.S.A. 90, 5113-5117, 1993
A;Title: Expression cloning of an ATP receptor from mouse neuroblastoma cells.
A;Reference number: A47556; MUID:93281707; PMID:7685114
A;Accession: A47556
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-373 <LUS>
A;Cross-references: UNIPROT:P35383; GB:U14751; NID:g309457; PIDN:AAA39871.1; PID:g309458
C;Superfamily: ATP receptor P2u
C;Keywords: transmembrane protein

Query Match 19.2%; Score 371; DB 2; Length 373;
Best Local Similarity 31.6%; Pred. No. 9.1e-25;
Matches 113; Conservative 42; Mismatches 115; Indels 88; Gaps 12;
QY 43 CQSEKRYQVLSLAYSIIFILGLPLNGTVLHWSWGQTKRWSCATTYLVNLMVADLLYL 102
DB 25 CRNEDFKYLLPVSYGVCVGLCLNAVGLYIFLCRLKTNASTTTFMFLAVSDALYAA 84
QY 103 -LPFLIITYSLDDRPFGELCKLVHFLFYINLYGSIILLITCISVHQLGVCHPLCSPY 161
DB 85 SLPLLYVYARGDHWPFSTVLCVLRFLFYNDYCSILFLTCISVHRCVGLVLRPLSLRW 144
QY 162 RTRRHAWLGTSTTVALVQLLPTLAFSHDYINGOMIWDMTSQENFDRLFYAGIVLT 221
DB 145 GRARYARRVAAVWVWLVLACQAPVLYFVTT-ARGPLTCHDTSARELFSHFVAYSSVM-- 202


```
QY 222 SGFLSLGHFGVLF-----TGQEPDQARGPHEDRQ--HSPSQV 259
D 203 ---LGILL--FAVPFSVILVCVLMARELLKPAYGTG-----GLPRAKRSVRIALV 250
QY 260 HPDHTGWPMLHPLFCALPYH-----SULLPHLLSAPS-----GLPALDGSQCG 304
D 251 -----LAVFAL-----CFLPHVVRTLYYSPFSLDLSCHTLNAINMAYKITRPLASANS- 300
QY 305 LQDMEASGECEQLPQSPVLSFKGKNRVRLLQKLR-----QNKLGEPHAPGR 351
D 301 -----LDPLVYFLAGRLVRFARDAKPPTPTSPQARRKGLGHRNR 343

RESULT 5
G protein-coupled receptor - human
C:Species: Homo sapiens (man)
C>Date: 15-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C:Accession: S68679
R:Stam, N.J.; Klomp, J.; van de Heuvel, M.; Olijve, W.
FEBS Lett. 384, 260-264, 1996
A:Title: Molecular cloning and characterization of a novel orphan receptor (P(2P)) expressed in human placenta
A:Reference number: S68679; MUID:96197801; PMID:8617367
A:Accession: S68679
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-365 <STA>
A:Cross-references: UNIPROT:P51582; EMBL:X96597; NID:gl296631; PIDN:CAA65415.1; PID:gl296631
C:Superfamily: ATP receptor P2u
C:Keywords: G protein-coupled receptor

Query Match 19.08; Score 367; DB 2; Length 365;
Best Local Similarity 41.18; Pred. No. 2e-24; Indels 8; Gaps 3;
Matches 79; Conservative 30; Mismatches 75;

QY 43 QCFSEKYQVYLSMAYSIIFILGFLPLNGTVLHWSGQTKRWSGATTYLVNLMVADLLYL 102
D 27 CWFDEDFKILLPVSYAVFVLGGLNAPTLWLFIFRLRPWDATATYMFHLASDLYL 86
QY 103 -LPPLIITYSLDDRPFGECLLKVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCLSPY 161
D 87 SLPTLIYYAAHNNHWPFGTEICKRVEFLFYNNLYCSVFLTCTISVHRVYLGICHPPLRALRW 146
QY 162 RTRRHAWLGTSTTVALVQLLPLAFSHTDYINGQMIWYDMTSQENFDRFLFAYGIVLTL 221
D 147 GRPLAGLLCLAVLVVAGCLVPNLFVTTISNKGTTVLCDDTTRPEBFDHVHFS----- 201
QY 222 SGFLSLGHFGV 233
D 202 SAVNGLL--FGV 211

RESULT 6
G protein-coupled receptor - chicken
C:Species: Gallus gallus (chicken)
C>Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: S33733
R:Webb, T.E.; Simon, J.; Krishek, B.J.; Bateson, A.N.; Smart, T.G.; King, B.F.; Burnstock, P.
FEBS Lett. 324, 219-225, 1993
A:Title: Cloning and functional expression of a brain G-protein-coupled ATP receptor.
A:Reference number: S33733; MUID:93285340; PMID:8508924
A:Accession: S33733
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-362 <WEB>
A:Cross-references: UNIPROT:P34996; EMBL:X73268; NID:g395084; PIDN:CAA51716.1; PID:g395084
C:Superfamily: ATP receptor P2u
C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match 17.9%; Score 346; DB 2; Length 362;
Best Local Similarity 30.5%; Pred. No. 1.4e-22;
Matches 97; Conservative 49; Mismatches 128; Indels 44; Gaps 10;
```

```
QY 53 YLSLAYSIIIFILGFLPLNGTVLHWSGQTKRWSGATTYLVNLMVADLLYL-LPPLIITYS 111
D 42 YLPTVILVITGFLGNSVALWMEFVHMKRPWSGISVYMFNLALADFLVLTLPALIFYF 101
QY 112 LDDRPFGECLLKVHFLFYINLYGSIILLTCTISVHQFLGVCHPLCSLPYRTRHAWLGT 171
D 102 NKTDMIFGDVMCKLQRFIFHVNLYGSIILLTCTISVHRVYLVGVVHPPLKSLGRUKKNQAVYS 161
QY 172 STTVALVQLLPLAFSHTDYINGQMI-WYDMTSQENFDRFLFAYGIVLTL-----SGFLS 226
D 162 SLVMAVVAIAPILFYSGTVRRNKITCYDTTADAELRSVYFVSMCTTVFMFCIPIV 221
QY 227 LLGHFGVLTQCEPDQARGPHEDRQSPQVHPDHTGTGWPLHPLFCALPYHSL-ILP 285
D 222 ILGCYGLI-----VKALIYKLDNSPARRK-----SIYLVITVITVFAVSYP 264
QY 286 HLLSAFSGLPALD--GSQCGLQD-----MEASGECEQLPQSPVLSFKGKN 331
D 265 FVMKTLNLRARLDFQTQMCAPNDKYATVQVTRGLASLNSC-----VDFILYFLAGDT 319
QY 332 -RVRLQKLRQNKLGEPH 348
D 320 FRRRLSRATRKSSRRSEP 337

RESULT 7
G protein-coupled receptor P2Y1 - human
N:Alternate names: P2Y1 purinoceptor; P2Y1 purinoceptor
C:Species: Homo sapiens (man)
C>Date: 10-May-1996 #sequence_revision 16-Aug-1996 #text_change 09-Jul-2004
C:Accession: JC4737; JC4615; S54253
R:Janssens, R.; Commun, D.; Piroton, S.; Samson, M.; Parmentier, M.; Boeynaems, J.M.
Biochem. Biophys. Res. Commun. 221, 588-593, 1996
A:Title: Cloning and tissue distribution of the human P2Y1 receptor.
A:Reference number: JC4737; MUID:96205320; PMID:8630005
A:Accession: JC4737
A:Molecule type: DNA
A:Residues: 1-373 <JAN>
A:Cross-references: UNIPROT:P47900; GB:S81950; NID:gl839438; PIDN:AA847091.1; PID:gl839438
R:Ayyanathan, K.; Webb, T.E.; Sandhu, A.K.; Achwal, R.S.; Barnard, E.A.; Kunapuli, S.P.
Biochem. Biophys. Res. Commun. 218, 783-788, 1996
A:Title: Cloning and chromosomal localization of the human P2Y1 purinoceptor.
A:Reference number: JC4615; MUID:96158962; PMID:8579591
A:Accession: JC4615
A:Molecule type: mRNA
A:Residues: 1-373 <AYY>
A:Cross-references: GB:U42029; NID:gl147730; PIDN:AAA97872.1; PID:gl147731
A:Experimental source: erythro leukemia cells
R:Leon, C.; Vial, C.; Cazenave, J.; Gachet, C.
submitted to the EMBL Data Library, May 1995
A:Description: Cloning of a human putative P2Y receptor.
A:Reference number: S54253
A:Accession: S54253
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-137,139-373 <LEO>
A:Cross-references: EMBL:249205; NID:g798835; PIDN:CAA89066.1; PID:g798835
C:Comment: This receptor belongs to a family of G protein-coupled receptors. It responds to ATP.
C:Genetics:
A:Gene: P2Y1; GDB:P2RY1
A:Cross-references: GDB:677125; OMIM:601167
A:Map position: 3pter-3qter
C:Superfamily: ATP receptor P2u
C:Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane protein
F:52-77/Domain: transmembrane #status predicted <TM1>
F:88-111/Domain: transmembrane #status predicted <TM2>
F:124-152/Domain: transmembrane #status predicted <TM3>
F:171-191/Domain: transmembrane #status predicted <TM4>
F:214-237/Domain: transmembrane #status predicted <TM5>
F:261-282/Domain: transmembrane #status predicted <TM6>
F:305-328/Domain: transmembrane #status predicted <TM7>
```


N;Alternate names: G-protein coupled receptor
C;Species: Homo sapiens (man)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
C;Accession: T09508
R;Bohm, S.K.; Trumpp, A.; Khitin, L.M.; Kong, W.; Payan, D.G.; Bunnett, N.W.
submitted to the EMBL Data Library, April 1997
A;Description: The human purinergic receptor P2Y5 is encoded in intron 17 of the retinoblastoma gene.
A;Reference number: 216705
A;Accession: T09508
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-344 <BOH>
A;Cross-references: UNIPROT:P43657; EMBL:AF000546; NID:G2232068; PID:G2232069
C;Genetics:
A;Map position: 13
C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor; transmembrane protein

Query Match 14.28; Score 274.5; DB 2; Length 344;
Best Local Similarity 33.8%; Pred. No. 2.4e-15;
Matches 70; Conservative 39; Mismatches 77; Indels 21; Gaps 7;

QY 32 VDMNTSQGLQCPSEKVKQVLSLAYSIIIFILGPLNGTGLVHWSGQTKRWSCATTYLV 91
DB 2 VSVNSSH----CFVNDSEKTYLGCMSFVFLGLVSNCAIVIFCVLKVNRNETHYMI 57
QY 92 NLWVADLLYL-LPFLIITSLDRNPFGLLCKLVHFLFYINLYSGSILLTLCISVHQFL 150
DB 58 NLAMSDLFVETLFRIF-YFTTRNPFGLLCKLVHFLFYINLYSGSILLTLCISVDRFL 116
QY 151 GVCHPLCSLPYRTRHAWLGSTTVALVQLLPT--LAFSHTDYINGQMIWDMTSQEN 208
DB 117 AIVPFKSKTLTKENAKIVCTGVNLVIGSAPAVFQSTHSGNASEACF-----EN 171
QY 209 PD-----RLFAYGIVLTSLGFLSLGHF 231
DB 172 FPEATWTKYLSRVI-----FTEIVGFF 194

RESULT 11
JC5549
heptahelical P2Y5-like receptor - human
C;Species: Homo sapiens (man)
C;Date: 02-Sep-1997 #sequence_revision 05-Sep-1997 #text_change 09-Jul-2004
C;Accession: JC5549
R;Janssens, R.; Boeynaems, J.M.; Godart, M.; Communi, D.
Biochem. Biophys. Res. Commun. 236, 106-112, 1997
A;Title: Cloning of a human heptahelical receptor closely related to the P2Y5 receptor.
A;Reference number: JC5549; MUID:97366605; PMID:9223435
A;Accession: JC5549
A;Molecule type: DNA
A;Residues: 1-370 <JAN>
A;Cross-references: UNIPROT:Q99677; DDBJ:AF005419; NID:G2240034; PIDN:AAB56322.1; PID:92240034
C;Superfamily: ATP receptor P2u

Query Match 13.4%; Score 258.5; DB 2; Length 370;
Best Local Similarity 33.2%; Pred. No. 6.5e-15;
Matches 69; Conservative 35; Mismatches 93; Indels 11; Gaps 4;

QY 28 DMEKVDMTSQEGL-----QFSEKVKQVLSLAYSIIIFILGPLNGTGLVHWSGQ 79
DB 8 DFQFQDSNSSLRPLRGNTANTNTCIDVDSFKYNLNGAVISVVFILGLITNSVSLFVFCFR 67
QY 80 TKRWSCATTYLVNLMVADLLYL-LPFLIITSLDRNPFGLLCKLVHFLFYINLYSGS 138
DB 68 MKWRSETAIFITNLAVSDLLFVCTLPFKIF-YFNENRHWPFQGTLCISGTAFLNLYGSM 126
QY 139 LLLTCTISVHQFLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTDYINGQM 198
DB 127 LFLTCTISVDRFLAIVYFPRSTRIRTRNSAIVCAVGWTLVLSGGISASLFTNNVNTAT 186
QY 199 IWDMTSQENEDR-LFAYGIVLTSLGFL 225

DB 187 TCFEGLSRVWKTYLSKITIFIEVVGFI 214

RESULT 12
JC2492
G protein-coupled receptor 1 - rat
N;Alternate names: GPR-1
C;Species: Rattus norvegicus (Norway rat)
C;Date: 16-Mar-1995 #sequence_revision 26-May-1995 #text_change 09-Jul-2004
C;Accession: JC2492
R;Marchese, A.; Cheng, R.; Lee, M.C.; Porter, C.A.; Heiber, M.; Goodman, M.; George, S.R.
Biochem. Biophys. Res. Commun. 205, 1952-1958, 1994
A;Title: Mapping studies of two G protein-coupled receptor genes: An amino acid difference between the rat and human genes.
A;Reference number: JC2492; MUID:95110347; PMID:7811287
A;Accession: JC2492
A;Molecule type: mRNA
A;Residues: 1-353 <MAR>
A;Cross-references: UNIPROT:P46090; GB:S74702; NID:G786483; PIDN:AAB32978.1; PID:G786484
C;Superfamily: vertebrate rhodopsin
C;Keywords: glycoprotein; lipoprotein; phosphoprotein; receptor; thiolester bond; transmembrane protein; transmembrane #status predicted <TM2>
F;74-94/Domain: transmembrane #status predicted <TM3>
F;112-133/Domain: transmembrane #status predicted <TM3>
F;134-135/Region: DR motif
F;155-175/Domain: transmembrane #status predicted <TM4>
F;209-229/Domain: transmembrane #status predicted <TM5>
F;246-266/Domain: transmembrane #status predicted <TM6>
F;295-306/Domain: transmembrane #status predicted <TM7>
F;14,273/Binding site: carboxylate (Asn) (covalent) #status predicted
F;150,231/Binding site: phosphate (Thr) (covalent) (by protein kinase A) #status predicted
F;330/Binding site: palmitate (Cys) (covalent) #status predicted

Query Match 13.3%; Score 258; DB 2; Length 353;
Best Local Similarity 30.8%; Pred. No. 6.8e-15;
Matches 72; Conservative 41; Mismatches 81; Indels 40; Gaps 8;

QY 26 SRDM--EKVDMTSQEGLQCFSEKVKQVLS-----LAYSIIIFILGPLNGTGLV-- 74
DB 4 SREMLFEELDNYSALEYSPQDAENYVPGIVHWSILLYALAFVLPVGINAIVIMFM 63
QY 75 -HSWGOTKWSGATTVNLMVADLLYL-LPFLIITSLDRNPFGLLCKLVHFLFYI 132
DB 64 GPKWKT---VTTLWFLNLAIDFVFLFLPLYSYVALSFHMPFGRWLCKLNSFIQGL 119
QY 133 NYGSLTLLTCTISVHQFLGVCHPLCSLPYRTRHAWLGSTTVALVQLLPTLAFSHTD 192
DB 120 NMFSSVFFLTVISLDRIYHILHPLGSLHPRTLKNSLLVFLVWLLASLGGTFLYFRDVT 179
QY 193 YINGQMIWDMTSQENEDRL-----FAYGIVLT-----SQFLSIL 228
DB 180 EVNRIICYN----NFQSYELTMRHHVLTWVKFLFGYLLPLLTMSSCYLCII 228

RESULT 13
A41795
somatostatin receptor 1 - human
C;Species: Homo sapiens (man)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C;Accession: A41795
R;Yamada, Y.; Post, S.R.; Wang, K.; Tager, H.S.; Bell, G.I.; Seino, S.
Proc. Natl. Acad. Sci. U.S.A. 89, 251-255, 1992
A;Title: Cloning and functional characterization of a family of human and mouse somatostatin receptors.
A;Reference number: A41795; MUID:92108031; PMID:1346068
A;Accession: A41795
A;Molecule type: DNA
A;Residues: 1-391 <YAM>
A;Cross-references: UNIPROT:P30872; GB:M81829; NID:G307433; PIDN:AAA58247.1; PID:G307434
A;Note: sequence extracted from NCBI backbone (NCBI:74767, NCBIP:74768)
C;Genetics:
A;Gene: GDB:SSTR1
A;Cross-references: GDB:134185; OMIM:182451
A;Map position: 14q13-14q13
A;Introns: #status absent
C;Superfamily: vertebrate rhodopsin

C;Keywords: G protein-coupled receptor; glycoprotein; hormone receptor; lipoprotein; phd
F;58-84/Domain: transmembrane #status predicted <TM1>
F;95-120/Domain: transmembrane #status predicted <TM2>
F;132-153/Domain: transmembrane #status predicted <TM3>
F;173-195/Domain: transmembrane #status predicted <TM4>
F;220-250/Domain: transmembrane #status predicted <TM5>
F;269-296/Domain: transmembrane #status predicted <TM6>
F;302-326/Domain: transmembrane #status predicted <TM7>
F;44,48,381/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;130-208/Disulfide bonds: #status predicted
F;172/Binding site: phosphate (Thr) (covalent) (by cAMP-dependent kinase) #status predicted
F;265/Binding site: phosphate (Ser) (covalent) (by cAMP-dependent kinase) #status predicted
F;339/Binding site: palmitate (Cys) (covalent) #status predicted

Query Match 12.8%; Score 248.5; DB 2; Length 391;
Best Local Similarity 32.6%; Pred. No. 5.2e-14;
Matches 74; Conservative 41; Mismatches 103; Indels 9; Gaps 6;
QY 7 PGRGS--RGSRGALLLEGASRDMEKVDNMTSQEQGLCOFSEKYKQVLSLAYSLIFIL 64
Db 16 PPGSGCGEGGSRGP--GAGADGHEEPGRNASQNGTLSE--GQSAILISFIYSVVCIV 71
QY 65 GLPLNGTVLWHSWGOTKRWSCATTYLVNLMVAD--LLYVLLPFLIITYSLDDRWPFGLLC 123
Db 72 GLCGNSMTVYVILRYAKMKTATNIYILNLAIDELMLSVPL--VTSTLLRHWPFGALLC 130
QY 124 KLVHFLFYINLYGSIILLTICISVHOFGLVCHPLCSLPYRTRHAWLGTSTTVALVLIOLL 183
Db 131 RLVLSVDVNMFTSIYCLTVLSVDYAVVHPDKAARVRRPTVAKVNLGVWVJSLVIL 190
QY 184 PTLAFSHTDYINGQMIWDMTSCQENFDR--LPAYGIVLTLGFLSLG 229
Db 191 PIWFPSRTAANDGTGTVACNMLMPEAQRWLGVLYTFLMGFLLPVG 237

RESULT 14
S15403
angiotensin II receptor type 1 - bovine
C;Species: Bos primigenius indicus x Bos primigenius taurus (cattle)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 24-Nov-1999
C;Accession: S15403
R;Sasaki, K.; Yamano, Y.; Bardhan, S.; Iwai, N.; Murray, J.J.; Hasegawa, M.; Matsuda, Y.
Nature 351, 230-233, 1991
A;Title: Cloning and expression of a complementary DNA encoding a bovine adrenal angioten-
A;Reference number: S15403; MUID:91251900; PMID:2041569
A;Accession: S15403
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-359 <SAS>
A;Cross-references: GB:X62294; NID:g43; PIDN:CAA44182.1; PID:g44
C;Superfamily: vertebrate rhodopsin

Query Match 12.8%; Score 247.5; DB 2; Length 359;
Best Local Similarity 31.0%; Pred. No. 5.7e-14;
Matches 63; Conservative 42; Mismatches 87; Indels 11; Gaps 4;
QY 34 MNTSQEQL-----CQSEKVKQVLSL--AYSIIIFILGVLPLNGTVLWHSWGOTKRWSC 85
Db 3 LNSTEDGIKIQDDCPKAGRHNHYIFIMPTYSIIIFVVGISLVVIVFYFMKLTQ 62
QY 86 ATTYLVNLMVADLLVYL--LPFLIITYSDDRWPFGLCKLVHFLFYINLYGSIILLTICI 144
Db 63 ASVFLNLALADLCPLLTPLVAVTANEYRWPFGNYLCKIASASVSFNLYASVFLTCL 122
QY 145 SVHQFLGVCHPLCSLPYRTRHAWLGTSTTVALVQLLPLTAFSHTDYINGQMIWDMT 204
Db 123 SIDRYLAIVHPMKSLRRLTMLVAKVTCIIWLLAGLASPLTIIHRNVFFIENTNITVCAF 182
QY 205 SOENFDRLFYAGIVLT--LSGFL 225
Db 183 HYSQNSTLPVGLGLTKNIGFL 205

RESULT 15
I48705

proteinase activated receptor 2 - mouse
C;Species: Mus musculus (house mouse)
C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C;Accession: I48705
R;Nystedt, S.; Larsson, A.K.; Aberg, H.; Sundelin, J.
J. Biol. Chem. 270, 5950-5955, 1995
A;Title: The mouse proteinase-activated receptor-2 cDNA and gene. Molecular cloning and f
A;Reference number: I48705; MUID:95197620; PMID:7890726
A;Accession: I48705
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-399 <RES>
A;Cross-references: UNIPROT:P55086; EMBL:Z48043; NID:g663020; PIDN:CAA88097.1; PID:g66302
C;Superfamily: ATP receptor P2u

Query Match 12.7%; Score 246; DB 2; Length 399;
Best Local Similarity 35.1%; Pred. No. 8.8e-14;
Matches 68; Conservative 34; Mismatches 80; Indels 12; Gaps 7;
QY 48 KYQVYLSLAYSIIFILGVLPLNGTVLWHSWGOTKRWSCATTYLVNLMVADLLYVLLPFLI 107
Db 74 KLTTFELPVVYIIVFVIGLPSNGMALWIFLFRTKKGPVAVYMANLALADLLSVIWFPLK 133
QY 108 ITYSL-DDRWPFGLCKLVHFLFYINLYGSIILLTICISVHOFGLVCHPLCSLPYRTRH 166
Db 134 ISVHLGNWVYGEALCKVLIGFFYGNMYCSILFMFLSVQRYWTVINPW-GHP-RKKAN 191
QY 167 AWLGTS--TTWALVVLQLLPTAFSHTDYINGQMI--WYDMTSCQENF--DRLFAYGIVLTLS 222
Db 192 IAVGVSLATWLLIFLVTIPLYVMKQIYIPALNITTCVDVLPVEVLGDMENYFSLAIG 251
QY 223 GFLSLLGFGVLF 236
Db 252 VFL-----FPALLT 260

Search completed: November 4, 2004, 16:57:58
Job time : 42 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

QM protein - protein search, using sw model

Run on: November 4, 2004, 16:51:19 ; Search time 191 Seconds
(without alignments)

1084.476 Million cell updates/sec

Title: US-10-763-972-2

Perfect score: 1936

Sequence: 1 MLSILLPSRSGSRGAL.....QNKLGHPAGKCEPGLNRS 360

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

UniProt_02.*

1: uniprot_sprot.*

2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1936	100.0	361	Q711G2	Q711G2 homo sapien
2	1936	100.0	361	CAC87811	CAC87811 homo sapi
3	447	23.1	328	P2Y3_CHICK	P2Y3_CHICK
4	447	23.1	328	P2Y3_MELGA	P2Y3_MELGA
5	421	21.7	374	O57466	O57466 meleagris g
6	416	21.5	537	P2Y8_XENLA	P2Y8_XENLA
7	414	21.4	537	Q7ZWQ7	Q7ZWQ7 xenopus lae
8	400	20.7	328	P2Y6_RAT	P2Y6_RAT
9	400	20.7	328	AAH72520	AAH72520 rattus no
10	395	20.4	328	P2Y6_MOUSE	P2Y6_MOUSE
11	395	20.4	328	AAH64095	AAH64095 mus muscu
12	388	20.0	361	P2Y4_RAT	P2Y4_RAT
13	387.5	20.0	328	P2Y6_HUMAN	P2Y6_HUMAN
14	387.5	20.0	328	AAP35417	AAP35417 homo sapi
15	387.5	20.0	377	P2Y2_HUMAN	P2Y2_HUMAN
16	386	19.9	361	P2Y4_MOUSE	P2Y4_MOUSE
17	386	19.9	361	BAC36314	BAC36314 mus muscu
18	381.5	19.7	347	Q7ZZA4	Q7ZZA4 brachydanio
19	371	19.2	373	P2Y2_MOUSE	P2Y2_MOUSE
20	367	18.0	365	P2Y4_HUMAN	P2Y4_HUMAN
21	366.5	18.9	374	P2Y2_RAT	P2Y2_RAT
22	366.5	18.9	374	AAH61754	AAH61754 rattus no
23	363.5	18.8	349	Q6P852	Q6P852 xenopus tro
24	363.5	18.8	349	AAH61378	AAH61378 xenopus t
25	359	18.5	357	Q9DE05	Q9DE05 raja erinac
26	346	17.9	362	P2YR_CHICK	P2YR_CHICK
27	346	17.9	362	P2YR_MELGA	P2YR_MELGA
28	329.5	17.0	361	Q9OX57	Q9OX57 xenopus lae
29	329.5	17.0	373	P2YR_CAVPO	P2YR_CAVPO
30	329.5	17.0	373	P2YR_RAT	P2YR_RAT
31	328	16.9	373	P2YR_HUMAN	P2YR_HUMAN

32	326.5	16.9	373	1	P2YR_BOVIN	P48042 bos taurus
33	320	16.5	373	1	P2YR_MOUSE	P49650 mus musculu
34	320	16.5	373	2	Q8BMJ5	Q8BMJ5 mus musculu
35	320	16.5	373	2	BAC28413	BAC28413 mus muscu
36	320	16.5	373	2	BAC29506	BAC29506 mus muscu
37	291.5	15.1	337	2	Q6Y1R5	Q6Y1R5 rattus norv
38	291.5	15.1	337	2	AAP32736	AAP32736 rattus no
39	288	14.9	337	2	Q6Y1F8	Q6Y1F8 mus musculu
40	288	14.9	337	2	AAT10591	AAT10591 mus muscu
41	282.5	14.6	308	1	P2Y5_CHICK	P32250 gallus gall
42	280	14.5	344	1	P2Y5_MOUSE	Q8BMC0 mus musculu
43	280	14.5	344	2	AAH69991	AAH69991 mus muscu
44	279.5	14.4	121	2	Q8HYZ8	Q8HYZ8 bos taurus
45	278.5	14.4	337	1	GP80_HUMAN	Q96P68 homo sapien

ALIGNMENTS

RESULT 1									
Q711G2	PRELIMINARY;	PRT;	361	AA.					
AC	Q711G2;								
DT	05-JUL-2004 (T-EMBLrel. 27, Created)								
DT	05-JUL-2004 (T-EMBLrel. 27, Last sequence update)								
DT	05-JUL-2004 (T-EMBLrel. 27, Last annotation update)								
DE	Nucleoside/nucleotide receptor.								
GN	Name=P2Y2-like;								
OS	Homo sapiens (Human)								
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.								
OX	NCBI_TaxID=9606;								
[1]									
RP	SEQUENCE FROM N.A.								
RC	TISSUE=Blood;								
RA	Bruss M., Bonisch H., Kugelgen I.;								
RL	Submitted (SEP-2003) to the EMBL/GenBank/DBJ databases.								
[2]									
RP	SEQUENCE FROM N.A.								
RC	TISSUE=Blood;								
RA	Bruss M.;								
RL	Submitted (SEP-2001) to the EMBL/GenBank/DBJ databases.								
DR	EMBL; AJ345013; CAC87811.1; "								
DR	GO; GO:0004872; F:receptor activity; IEA.								
DR	InterPro; IPR002276; GPCR_Rhodopsn.								
DR	InterPro; IPR002286; P2_purinocptor.								
DR	Pfam; PF00001; 7tm.1; 1.								
DR	PRINTS; PR00237; GPCRHHODOPS.								
DR	PRINTS; PR01157; P2YPURNOCPTR.								
DR	PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.								
KW	Receptor.								
SQ	SEQUENCE 361 AA; 40633 MW; 3992A1A1EF512AFE CRC64;								
Query Match 100.0%; Score 1936; DB 2; Length 361;									
Best Local Similarity 100.0%; Pred. No. 1.7e-134;									
Matches 360; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
Qy	1	MLSILLPSRSGSRGALLLEGASRDMKVDNMTSQGLCQFSEKQKVYLSLAYSI	60						
Db	1	MLSILLPSRSGSRGALLLEGASRDMKVDNMTSQGLCQFSEKQKVYLSLAYSI	60						
Qy	61	IFILGLPLNGTIVHWSGQTKRWSCATTIVNLMVADLLVLLPFLIITYSLDDRWPFGE	120						
Db	61	IFILGLPLNGTIVHWSGQTKRWSCATTIVNLMVADLLVLLPFLIITYSLDDRWPFGE	120						
Qy	121	LLCKLVHFLFYINLYSGILLTTCISVHQFLGVCHPCLSPYRTRRHAWLGSTTWALVVL	180						
Db	121	LLCKLVHFLFYINLYSGILLTTCISVHQFLGVCHPCLSPYRTRRHAWLGSTTWALVVL	180						
Qy	181	QLLPTLAFSTDYINGQMIWYDMTSONPRLFAYGIVLTLSGFLSLGHGFLVFTDQGE	240						
Db	181	QLLPTLAFSTDYINGQMIWYDMTSONPRLFAYGIVLTLSGFLSLGHGFLVFTDQGE	240						

	Matches	86;	Conservative	32;	Mismatches	73;	Indels	2;	Gaps	2.
QY	35	NTSQEGLCPFSKYYKVILSLAYSIIIFLGPLNGTVLVHSGQTWKWSCATTYLINLM	94							
Dd	5	NFTAGRNSCTFQEERQVLLPLVYSVFVLGFLPNAVVIGIWLARKALTRTTTMYMLNLA	64							
QY	95	VADLLLYL-LPEFLITYSIDDRWPFGEELCKLVHFIFYNLNYGSILLLTICISVHQFLGVC	153							
Dd	65	TADLLLYVCSPLLIINYTKDYWPFGDFCKFKVRQFYTNLHGSIILFLTCTISVQRVMGIC	124							
QY	154	HPLCSL-PYETRRHWLGSTTWALVVLQLLPFLAFSHTDIYINGOMIWMTSOENFDRL	212							
Dd	125	HPLASWHKKKGKLTLVCAAWFMIVIAOCLTFPVFASTGTQRNRITVCYDLSPDPSASY	184							
QY	213	PAYGIVLTLSGFL	225							
Dd	185	FPYGITLTITGFL	197							
<hr/>										
	RESULT 5									
	O57466									
ID	O57466	PRELIMINARY;	PRT;	374 AA.						
AC	O57466;									
DT	01-JUN-1998	(TREMBLrel. 06, Created)								
DT	01-JUN-1998	(TREMBLrel. 06, Last sequence update)								
DT	01-MAR-2004	(TREMBLrel. 26, Last annotation update)								
DE	G protein coupled p2y nucleotide receptor.									
DE	Name=tp2y;									
OS	Melagris gallopavo (Common turkey);									
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;									
OC	Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Meleagris.									
OX	NCBI_TaxID=9103;									
[1]	_TaxID=9103;									
RN	SEQUENCE FROM N.A.									
RP	TISSUE=Blood.									
RC	MEDLINE=98086419; PubMed=9415702;									
RX	Boyer J.L., Waldo G.L., Harden T.K.;									
RT	"Molecular cloning and expression of an avian G protein-coupled P2Y receptor.";									
RL	Mol. Pharmacol. 52:928-934(1997).									
DR	EMBL; AF031897; AAC60339.1; "									
DR	GO; GO:0016021; C:integral to membrane; IEA.									
DR	GO; GO:0045028; F:purinergic nucleotide receptor activity, G-. . ; IEA.									
DR	GO; GO:0004872; F:receptor activity; IEA.									
DR	GO; GO:0001584; F:rhoposin-like receptor activity; IEA.									
DR	GO; GO:0007186; P:G-protein coupled receptor protein signalin. . ; IEA.									
DR	InterPro; IPR000276; GPCR_Rhodopsn.									
DR	InterPro; IPR000018; P2Y_purnocptor.									
DR	InterPro; IPR002286; P2_purnocptor.									
DR	Efam; PF00003; 7tm_1; 1.									
DR	PRINTS; PRO0237; GPCHRHODOPSN.									
DR	PRINTS; PRO1066; P2YAPRNOCPTR.									
DR	PRINTS; PRO1157; P2YPURNOCPTR.									
DR	PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.									
DR	PROSITE; PS50262; G'_PROTEIN_RECEP_F1_2; 1.									
KW	Receptor.									
SQ	SEQUENCE 374 AA; 42594 MW; 849C465722BDD02B CRC64;									
<hr/>										
	Query Match	21.7%;	Score	421;	DB	2;	Length	374;		
	Best Local Similarity	40.3%;	Pred.	No.	6e+23;					
	Matches	81;	Conservative	40;	Mismatches	72;	Indels	8;	Gaps	33.
QY	36	TSQEGLCPFSKYYKVILSLAYSIIIFLGPLNGTVLVHSGQTKRWSCATTYLINLMV	95							
Dd	26	TAAEAACKVFNEEPKFIILSFISGVIFVVGGLPNLSWAMWFVSRRPMWNATITYFNFLAI	85							
QY	96	ADLLLYL-LPEFLITYSIDDRWPFGEELCKLVHFIFYNLNYGSILLLTICISVHQFLGWCH	154							
Dd	86	SDTLVPESLPTLVVYYADRNNWPGKFVKVEFLVFLYANLYSIIILFLTCTISVHRVMGICH	145							
QY	155	PLCSIPLYETRHHWLGSTTWALVVLQLLPFLAFSHTDIYINGOMIWMTSOENFDRLFPA	214							
Dd	146	FIRSKDWKTTHAKLICVGLVWVTTCILINLLIFTISSKDNSTLCDTDKKEEFDHVH	205							

"Genetic and genomic tools for Xenopus research: The NIH Xenopus

RT initiative.",
 RL Dev. Dyn. 225:384-391 (2002).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Embryo;
 RA Klein S., Strausberg R.;
 RL Submitted (Feb-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; BC046837; AAH46837.1; -; -;
 DR GO; GO:0016021; C:integral to membrane; IEA.
 DR GO; GO:0045028; F:purinergic nucleotide receptor activity, G-. .; IEA.
 DR GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.
 DR GO; GO:0007186; P:G-protein coupled receptor protein signalin. .; IEA.
 DR InterPro; IPR000276; GPCR_Rhodpsn.
 DR InterPro; IPR000018; P2V4_purinocptor.
 DR InterPro; IPR002286; P2_purinocptor.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PRINTS; PR00237; GPCRHHODPSN.
 DR PRINTS; PR01066; P2Y4PRNOCPT.
 DR PRINTS; PR01157; P2Y4PRNOCPT.
 DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; UNKNOWN_1.
 DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
 DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
 SQ SEQUENCE 537 AA; 61981 MW; B030F67D76CB9622 CRC64;

Query Match 21.4%; Score 414; DB 2; Length 537;
 Best Local Similarity 31.8%; Pred. No. 2.8e-22;
 Matches 109; Conservative 58; Mismatches 138; Indels 38; Gaps 10;
 QY 34 MN-TSDEGLQFSEKQVYLSLAYSIFILGLPLNGTFLVHWSGQTKRWSGQTKRWS 92
 DB 25 MNLNTDTEICVFDEGFELLPSYSVAVFVGLPLNIAWIIAKRPNPTVTFWN 84
 QY 93 LMVADLLYL-LPFLIITYSLDDRWPFGEELCKLVHFLFYINLYGSILLTLCISVHQLG 151
 DB 85 LALSDTLYVLSLPTVYVYADKNWPFGEVLCVRLVFLYANLYSSILFLTCSVHYRG 144
 QY 152 VCHPLCSLPYRTRHAWLGSTTVALVQLPLTASHTDYINGQMTWDMTQENFDR 211
 DB 145 VCHPTISLRNNAHAYVICALVMSVTLCLVPLNLIIVTSVKVNTICHTTTPEDFAR 204
 QY 212 LFAY-GIVLTLSGF-LSLGLHGFVLTQGEQPDQGEPEHEDRQHSQVHPDHTGV 267
 DB 205 VVEYSTAIWCLFGIPCLIIAGCYGLMTRMLKPIVS-----GNQTLPSYKESIKT-- 257
 QY 268 WFLHPLFCALPYHLLPHLLHLSAFSGLPALDGSQC-----GLQMEASGCEQ 316
 DB 258 ----IIFVMAFAICFMPFHITRTLYYVYARLLGKCYALNVINVTYKTRPLAGANSC-- 311
 QY 317 LPQSPVLSF-KGGKRVRLQLKRLKONKLGHPAGKRCPCGLN 358
 DB 312 ---IDPILYFLANDYRRLIARTVRRS-----SVPNRCMTN 347

RESULT 8
 P2Y6 RAT STANDARD; PRT; 328 AA.
 AC Q63171;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE P2Y purinoceptor 6 (P2Y6).
 GN Name=P2Y6;
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Aortic smooth muscle;
 RX MEDLINE=96064682; PubMed=7592819;
 RA Chang K., Hanacka K., Kumada M., Takuwa Y.;
 RT "Molecular cloning and functional analysis of a novel P2 nucleotide receptor.";

RL J. Biol. Chem. 270:26152-26158 (1995).
 CC -I- FUNCTION: Receptor for extracellular UTP > ADP = 2-methylthio-ATP
 CC > ADP-beta-S > ATP = ATP-gamma-S. The activity of this receptor is
 CC mediated by G proteins which activate a phosphatidylinositol-
 CC calcium second messenger system. Functionally coupled to
 CC phospholipase C.
 CC -I- SUBCELLULAR LOCATION: Integral membrane protein.
 CC -I- TISSUE SPECIFICITY: Abundantly expressed in various tissues
 CC including lung, stomach, intestine, spleen, mesentery, heart, and,
 CC most prominently, aorta.
 CC -I- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
 CC
 CC THIS SWISS-PROT entry is copyrighted. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 DR EMBL; D63665; BAA09816.1; -;
 DR PIR; I55450; I55450.
 DR HSP; P34996; IDDD.
 DR RGD; 620269; P2ry6.
 DR InterPro; IPR000276; GPCR_Rhodpsn.
 DR InterPro; IPR001973; P2Y6_purinocptor.
 DR InterPro; IPR002286; P2_purinocptor.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PRINTS; PR00237; GPCRHHODPSN.
 DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
 DR PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
 KW G-protein coupled receptor; Glycoprotein; Transmembrane.
 FT DOMAIN 1 27
 FT TRANSNM 28 48
 FT DOMAIN 49 62
 FT TRANSNM 63 83
 FT DOMAIN 84 101
 FT TRANSNM 102 122
 FT DOMAIN 123 144
 FT TRANSNM 145 165
 FT DOMAIN 166 194
 FT TRANSNM 195 215
 FT DOMAIN 216 236
 FT TRANSNM 237 257
 FT DOMAIN 258 280
 FT TRANSNM 281 303
 FT DOMAIN 304 328
 FT TRANSNM 329 358
 FT CARBOHYD 5 5
 FT CARBOHYD 173 173
 SQ SEQUENCE 328 AA; 36677 MW; 58BE1997038BA5B CRC64;
 Query Match 20.7%; Score 400; DB 1; Length 328;
 Best Local Similarity 32.5%; Pred. No. 1.8e-21;
 Matches 108; Conservative 53; Mismatches 137; Indels 34; Gaps 9;
 QY 29 MEKVDNMTSQEQL-----QFSEKQVYLSLAYSIFILGLPLNGTFLVHWSGQTKRWS 84
 DB 1 MER-DNGTIQAPGLPPTTCVYREDFKRLLLPPVSVLVVGLPFLNVCVIAQICASRTLT 59
 QY 85 CATTYLVNLMVADLLYL-LPFLIITYSLDDRWPFGEELCKLVHFLFYINLYGSILLTLC 143
 DB 60 RSAVYTLNLALADLLVACSLPLIYNYARGDHWPFGLDACLRLVFLFYANLHGSILFLTC 119
 QY 144 ISVHQLGCHPLCSLPYR-TRRHAWLGSTTVALVQLPLTASHTDYINGQMTW 202
 DB 120 ISFYRLGICHPLAPWHKKGGRRAAVVCGVNLVVYTAQCLPTAVFAATGIQNRNVCVD 179
 QY 203 MTSQENFDRLFAYGIVLTLSGFL-----SLIGHGVLTQGEQPDQGEPEHEDRQHSQ 258
 DB 180 LSPFILLSTVLPYGMALTWIGLFLPTALLACYCRMARLRCQDGPAGVQAQRSKAAR 239
 QY 259 VHPDHTGTWFLHPLFCALPYHLLPHLLHLSAFSGLPALDGSQGLQMEASGCEQL 317

QY	259	VHPDHTGWPVHPLFCALPVHSLILPHILL-SAFSGLPALDQSCGLQDMENASGECEQL	319
DB	240	M-----AVVAAVVFISFLPHITKTAIAVRSPTGVCVPLETFAAAYKGR	287
QY	318	POPS-----PVLGSF-----KGGKNRVLLOKL	339
DB	288	PFASANSVLDPILFYFTQOKFRPHDLLLOKL	319
RESULT 10			
P2Y6 MOUSE			
ID	P2Y6 MOUSE	STANDARD;	PRT; 328 AA.
AC	Q9ESK9:		
DT	05-JUL-2004 (Rel. 44, Created)		
DT	05-JUL-2004 (Rel. 44, last sequence update)		
DT	05-JUL-2004 (Rel. 44, last annotation update)		
DE	P2Y purinoceptor 6 (P2Y6).		
OS	Name=P2Y6;		
OS	Mus musculus (Mouse).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.		
OX	NCBI_TaxID=10090;		
GN	[1]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=129/SVEV;		
RC	MEDLINE=21160052; PubMed=11259526;		
RX	Lazarowski E.R., Rochelle L.G., O'Neal W.K., Ribeiro C.M.P.,		
RA	Grubb B.R., Zhang V., Harden T.K., Boucher R.C.;		
RT	"Cloning and functional characterization of two murine uridine		
RT	nucleotide receptors reveal a potential target for correcting ion		
RT	transport deficiency in cystic fibrosis gallbladder.,"		
RL	J. Pharmacol. Exp. Ther. 297:43-49(2001).		
RL	[2]		
RP	SEQUENCE FROM N.A.		
RC	MEDLINE=23386257; PubMed=12477932; DOI=10.1073/pnas.242603899;		
RX	Strausberg R.D., Feingold E.A., Grouse L.H., Derge J.G.,		
RA	Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,		
RA	Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,		
RA	Diachenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,		
RA	Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,		
RA	Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,		
RA	Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullihy S.J.,		
RA	Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,		
RA	Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,		
RA	Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,		
RA	Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,		
RA	Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,		
RA	Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,		
RA	Rodriguez A.C., Greenwood J., Schmutz J., Myers R.M.,		
RA	Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,		
RA	Schmerch A., Schein J.E., Jones S.J.M., Marra M.A.;		
RT	"Generation and initial analysis of more than 15,000 full-length human		
RT	and mouse cDNA sequences.,"		
RL	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).		
CC	-!- FUNCTION: Receptor for extracellular UTP > ADP = 2-methylthio-ATP		
CC	> ADP-beta-S > ATP = ATP-gamma-S. The activity of this receptor is		
CC	mediated by G proteins which activate a phosphatidylinositol-		
CC	calcium second messenger system. Functionally coupled to		
CC	phospholipase C (By similarity).		
CC	SUBCELLULAR LOCATION: Integral membrane protein.		
CC	-!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.		
CC			
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration		
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation		
CC	at the European Bioinformatics Institute. There are no restrictions on it		
CC	use by non-profit institutions as long as its content is in no way		
CC	modified and this statement is not removed. Usage by and for commercia		
CC	entities requires a license agreement (see http://www.isb-sib.ch/announcement		
CC	or send an email to license@isb-sib.ch).		
CC			
DR	EMBL; AF298899; AAG24619.1; ..		
DR	EMBL; BC027331; AAH27331.1; ..		

DR MGD; MGI:2673874; P2ry6.
 DR GO; GO:0019103; F:pyrimidine nucleotide binding; IC.
 DR GO; GO:0045029; F:UDP-activated nucleotide receptor activity; IDA.
 DR GO; GO:0030321; P:transmembrane chloride transport; IDA.
 DR InterPro; IPR000276; GPCR_Rhodopsin.
 DR InterPro; IPR001973; P2Y6_purinocceptor.
 DR InterPro; IPR002286; P2_purinocceptor.
 DR Pfam; PF00001; 7tm_1; 1.
 DR PRINTS; PS00237; GPCR_Rhodopsin.
 DR PROSITE; PS00237; G-PROTEIN RECEPTOR FL1; FALSE_NEG.
 DR PROSITE; PS0262; G-PROTEIN RECEPTOR FL2; 1.
 KW G-protein coupled receptor; Glycoprotein; Transmembrane.
 FT DOMAIN 1 27
 FT TRANSMEM 28 48
 FT DOMAIN 49 62
 FT TRANSMEM 63 83
 FT DOMAIN 84 101
 FT TRANSMEM 102 122
 FT DOMAIN 123 144
 FT TRANSMEM 145 165
 FT DOMAIN 166 194
 FT TRANSMEM 195 215
 FT DOMAIN 216 236
 FT TRANSMEM 237 257
 FT DOMAIN 258 280
 FT TRANSMEM 281 303
 FT DOMAIN 304 328
 FT DISULFID 99 177
 FT CARBOHYD 5 5
 FT CARBOHYD 173 173
 SQ SEQUENCE 328 AA; 36721 MW; 00F9DF5ADADF903E CRC64;

Query Match 20.4%; Score 395; DB 1; Length 328;
 Best Local Similarity 31.9%; Pred. No. 4.3e-21;
 Matches 106; Conservative 55; Mismatches 137; Indels 34; Gaps 9;
 QY 29 MEKVDNTSQOGL-----CQFSEKYQVYLSLAYSIIFILGLPLNGTVLWHSWGQTKRWS 84
 Db 1 MEQ-DNGTIQAGLPPTTCVYREDFKRLLLTPVSVLVWGLPLNLCVIAQICASRRTLT 59
 QY 85 CATTYLVNLMVADLLVYL-LPFLIITYSLDRWPFGLLCKLVHFLFYINLYGSIILLTC 143
 Db 60 RSAYVTNLALADMYACSLPFLIYNYARGDHPWFGDLACRFVFLFYANLHGSILFLTC 119
 QY 144 ISVHQFLGVCHPLCPLPYR-TRRHAWLGTSTWALVQLLPLTAFSHTDYINGQMIVWD 202
 Db 120 ISFQYLGICHLPLASHWHKGGRRAAWVGVVWLVAVTAQCLPTAVFATGQNRITCYD 179
 QY 203 MTSQENFDRLFYAGIVLTLSGFL-----SLLGHFVGLFTDQGPDPQARGEPHEDRQHSQ 258
 Db 180 LSPPTLSTRYLPYGMALTVIGFLPFLIALLACYCRMARRLCRODGPAGPVAQERSKAAR 239
 QY 259 VHPDHTGWPFLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQCGLODMASGECEQL 317
 Db 240 M-----AVVVAFAISFLPHITKTAYLAVRSTPGVSCPVLTFFAAYKGR 287
 QY 318 PQPS-----PVLSF-----KGGKRVRLLOKL 339
 Db 288 PFASVNSVLDPIILFYFTQKFRQPHDLLORL 319

RESULT 11
 AAH64095 PRELIMINARY; PRT; 328 AA.
 AC AAH64095;
 ID 02-MAR-2004 (TRENBLrel. 27, Created)
 DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
 DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
 DE Pyrimidinergic receptor P2Y, G-protein coupled, 6.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;

RN SEQUENCE FROM N.A.
 RP STRAIN=C57BL/6J; TISSUE=Mammary gland;
 RX MEDLINE=22388257; PubMed=12477932;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Schetz T.E.,
 RA Brownstein M.J., Udlin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Lodiellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McSwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Vallalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmitz J., Myers R.M., Butterfield Y.S.,
 RA Krzywinski M.I., Skalska U., Smallos D.E., Schnerch A., Schein J.E.,
 RA Jones S.J., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Mammary gland;
 RA Strausberg R.;
 RL Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
 DR EMBL; BC064095; AAH64095.1; -.
 KW Receptor.
 SQ SEQUENCE 328 AA; 36721 MW; 00F9DF5ADADF903E CRC64;

Query Match 20.4%; Score 395; DB 2; Length 328;
 Best Local Similarity 31.9%; Pred. No. 4.3e-21;
 Matches 106; Conservative 55; Mismatches 137; Indels 34; Gaps 9;
 QY 29 MEKVDNTSQOGL-----CQFSEKYQVYLSLAYSIIFILGLPLNGTVLWHSWGQTKRWS 84
 Db 1 MEQ-DNGTIQAGLPPTTCVYREDFKRLLLTPVSVLVWGLPLNLCVIAQICASRRTLT 59
 QY 85 CATTYLVNLMVADLLVYL-LPFLIITYSLDRWPFGLLCKLVHFLFYINLYGSIILLTC 143
 Db 60 RSAYVTNLALADMYACSLPFLIYNYARGDHPWFGDLACRFVFLFYANLHGSILFLTC 119
 QY 144 ISVHQFLGVCHPLCPLPYR-TRRHAWLGTSTWALVQLLPLTAFSHTDYINGQMIVWD 202
 Db 120 ISFQYLGICHLPLASHWHKGGRRAAWVGVVWLVAVTAQCLPTAVFATGQNRITCYD 179
 QY 203 MTSQENFDRLFYAGIVLTLSGFL-----SLLGHFVGLFTDQGPDPQARGEPHEDRQHSQ 258
 Db 180 LSPPTLSTRYLPYGMALTVIGFLPFLIALLACYCRMARRLCRODGPAGPVAQERSKAAR 239
 QY 259 VHPDHTGWPFLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQCGLODMASGECEQL 317
 Db 240 M-----AVVVAFAISFLPHITKTAYLAVRSTPGVSCPVLTFFAAYKGR 287
 QY 318 PQPS-----PVLSF-----KGGKRVRLLOKL 339
 Db 288 PFASVNSVLDPIILFYFTQKFRQPHDLLORL 319

RESULT 12
 P2Y4_RAT
 ID P2Y4_RAT STANDARD; PRT; 361 AA.
 AC O35811;
 DT 28-FEB-2003 (Rel. 41, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE P2Y purinoceptor 4 (P2Y4).
 GN Name=P2Y4; Synonyms=P2Y4;
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley; TISSUE=Liver;
RA Bogdanov Y.D., Wildman S., King B.F., Burnstock G.;
RL Submitted (AUG-1997) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC MEDLINE=98421765; PubMed=9751165;
RA Webb T.E., Henderson D., Roberts J.A., Barnard E.A.;
RT "Molecular cloning and characterization of the rat P2Y4 receptor.";
RL J. Neurochem. 71:1424-1434(1998).
CC -!- FUNCTION: Receptor for ATP and UTP coupled to G-proteins that
CC activate a phosphatidylinositol-calcium second messenger system.
CC Not activated by ADP or UDP.
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- TISSUE SPECIFICITY: Widely expressed at low levels. In brain,
CC higher expression in the pineal gland and ventricular system.
CC -!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@sib-sib.ch).
CC -----
DR EMBL; Y14705; CAA75007.1; -;
DR EMBL; Y11433; CAA72241.1; -;
DR HSP; P34996; 1DDD.
DR RGD; 61798; P2Y4.
DR InterPro; IPR000276; GPCR_Rhodpsn.
DR InterPro; IPR000018; P2Y4_purinocptor.
DR InterPro; IPR002286; P2_purinocptor.
DR Pfam; PF00001; 7tm1; 1.
DR PRINTS; PR00237; GPCR_RHODOPSIN.
DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; 1.
DR PROSITE; PS00262; G_PROTEIN_RECEP_F1_2; 1.
KW G-protein coupled receptor; Glycoprotein; Transmembrane.
FT DOMAIN 1 30 Extracellular (Potential).
FT TRANSMEM 31 58 1 (Potential).
FT DOMAIN 59 68 Cytoplasmic (Potential).
FT TRANSMEM 69 91 2 (Potential).
FT DOMAIN 92 108 Extracellular (Potential).
FT TRANSMEM 109 127 3 (Potential).
FT DOMAIN 128 149 Cytoplasmic (Potential).
FT TRANSMEM 150 170 4 (Potential).
FT DOMAIN 171 192 Extracellular (Potential).
FT TRANSMEM 193 218 5 (Potential).
FT DOMAIN 219 242 Cytoplasmic (Potential).
FT TRANSMEM 243 265 6 (Potential).
FT DOMAIN 266 283 Extracellular (Potential).
FT TRANSMEM 284 305 7 (Potential).
FT DOMAIN 306 361 Cytoplasmic (Potential).
FT DISULFID 104 181 By similarity.
FT CARBOHYD 175 175 N-linked (GlcNAc...) (Potential).
SQ SEQUENCE 361 AA; 40893 MW; 0377F9E54B449A3 CRC64;
Query Match 20.0%; Score 388; DB 1; Length 361;
Best Local Similarity 32.1%; Pred. No. 1.6e-20;
Matches 105; Conservative 54; Mismatches 126; Indels 42; Gaps 9;
QY 37 SQSQGLQCFSEKQVYLKSLAYSIIFILGLPGLTNGTVLHSHWGQTKRWSGATTVLVNLMVA 96
DB 17 SSGDGDGRNEEFKFIILLPMSYAVVFLGALNAPLWLFRLRPWDATATMYEHLALS 76
QY 97 DLLVYL-LPFLITYSLDDRPFGLCKLVHFLFYINLYGSIILLITLCISVHOFGLGVCHP 155
DB 77 DTLVYLSLPTLVYVYAAARNHWFPGTGLCKRFVFLFYVNLVYCSVLFTLCISVHYRLGICH 136

QY 156 LCSLPVRTRRHAWLGSTTVALVQLLTLAPSHSTDYINGQMIWYDMTSQENFDR--LF 213
DB 137 LRAIRWGRPRFASLLCLGVNLVWVAGCLVPLNLFVITNANGTTLCHDITLTPBEFDHYVYF 196
QY 214 AYGIVLTLTG--FLSLILGHFGLVFTDQGPDOARGEPHEDRQHSQVHPDPTGVWPLH 271
DB 197 SSAVMVLLFGLPFLITLVYGLMARLYRPLPAGQ-----SSRLRLSLRTIAVVLTV 249
QY 272 PLFCALPYH---SLLPPLHLLSAFSGLPALDGSQCL-----QDMASGECEQL 317
DB 250 FAVCFVPEHITRTIYQARLLQ-----DCHVLNIVNVVYKVTPLASANSC--- 296
QY 318 PQSPVL-SFKGKGNRVLLQKLRNK 343
DB 297 --LDPVLYLFTGDKYRNLQQLCRGSK 321
RESULT 13
P2Y6 HUMAN STANDARD; PRT; 328 AA.
AC Q15077; Q15754;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DB P2Y purinocceptor 6 (P2Y6).
GN Name=P2RY6;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
[1]
RP SEQUENCE FROM N.A.
RA Communi D., Parmentier M., Boeynaems J.M.;
RL Submitted (MAY-1996) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=97432828; PubMed=9286708;
RA Somers G.R., Hammet F., Woollett E., Richards R.I., Southey M.C.,
RA Vetter D.J.;
RT "Chromosomal localization of the human P2Y6 purinocceptor gene and
RT phylogenetic analysis of the P2Y purinocceptor family.";
RL Genomics 44:127-130(1997).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=97415792; PubMed=9268704;
RA Maier R., Glatz A., Mosbacher J., Bilbe G.;
RT "Cloning of P2Y6 cDNAs and identification of a pseudogene: comparison
RT of P2Y receptor subtype expression in bone and brain tissues.";
RL Biochem. Biophys. Res. Commun. 237:297-302(1997).
RN [4]
RP ERRATUM.
RX MEDLINE=98069816; PubMed=9412455;
RA Maier R., Glatz A., Mosbacher J., Bilbe G.;
RL Biochem. Biophys. Res. Commun. 240:298-302(1997).
RN [5]
RP SEQUENCE FROM N.A.
RA Gu J.R., Wan D.F., Zhao X.T., Zhou X.M., Jiang H.Q., Zhang P.P.,
RA Qin W.X., Huang Y., Qiu X.K., Qian L.F., He L.P., Li H.N., Yu Y.,
RA Yu J., Han L.H.;
RT "Novel human cDNA clones with function of inhibiting cancer cell
RT growth.";
RL Submitted (DEC-1999) to the EMBL/GenBank/DBJ databases.
RN [6]
RP SEQUENCE FROM N.A.
RA Puhl H.L. III, Ikeda S.R., Aronstam R.S.;
RT "cDNA clones of human proteins involved in signal transduction
RT sequenced by the Guthrie cDNA resource center (www.cdna.org).";
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
RN [7]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaby S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gnanarane P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Rulyk S.W., Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton M., Kettman M., Madan A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";

Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

CC -!- FUNCTION: Receptor for extracellular UDP > UTP > ATP. The activity of this receptor is mediated by G proteins which activate a phosphatidylinositol-calcium second messenger system.

CC -!- SUBCELLULAR LOCATION: Integral membrane protein.

CC -!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

EMBL; X97058; CAA65770.1; -;
EMBL; U52464; AAB03572.1; -;
EMBL; AF007892; AAB0712.1; -;
EMBL; AF007891; AAB0712.1; -;
EMBL; AF218005; AAG17247.1; -;
EMBL; AF498920; AAM18129.1; -;
EMBL; BC000571; AAH00571.1; -;
EMBL; BC009391; AAH009391.1; -;
PIR; JC4800; JC4800.
HSPF; P34996; 1DDD.
Genew; HGNC:8543; P2RY6.
MIM; 602451; -;
GO; GO:0005887; C: integral to plasma membrane; TAS.
GO; GO:0004930; F: G-protein coupled receptor activity; TAS.
GO; GO:0007200; P: G-protein signaling, coupled to IP3 second . . . ; TAS.
InterPro; IPR000276; GPCR_Rhodops.
InterPro; IPR001973; P2Y6_purinocptor.
InterPro; IPR002286; P2_purinocptor.
Pfam; PF00001; 7tm_1; 1.
PRINTS; PR00237; GPCR_RHODOPS.
DR PROSITE; PS00237; G-PROTEIN RECF F1_1; FALSE_NEG.
DR PROSITE; PS0262; G-PROTEIN RECF F1_2; 1.
KW G-protein coupled receptor; Glycoprotein; Transmembrane.
FT DOMAIN 1 27 Extracellular (Potential).
FT TRANSMEM 28 48 1 (Potential).
FT DOMAIN 49 62 Cytoplasmic (Potential).
FT TRANSMEM 63 83 2 (Potential).
FT DOMAIN 84 101 Extracellular (Potential).
FT TRANSMEM 102 122 3 (Potential).
FT DOMAIN 123 144 Cytoplasmic (Potential).
FT TRANSMEM 145 165 4 (Potential).
FT DOMAIN 166 194 Extracellular (Potential).
FT TRANSMEM 195 215 5 (Potential).
FT DOMAIN 216 236 Cytoplasmic (Potential).
FT TRANSMEM 237 257 6 (Potential).
FT DOMAIN 258 280 Extracellular (Potential).
FT TRANSMEM 281 303 7 (Potential).
FT DOMAIN 304 328 Extracellular (Potential).
FT CARBOHYD 5 5 N-linked (GlcNAc . .) (Potential).

FT DISULFID 99 177 By similarity.
FT CONFLICT 2 3 Missing (in Ref. 2).
SQ SEQUENCE 328 AA; 36429 MW; AAD6C55A43818107 CRC64;
Query Match 20.0%; Score 387.5; DB 1; Length 328;
Best Local Similarity 32.7%; Pred. No. 1.5e-20;
Matches 108; Conservative 42; Mismatches 143; Indels 37; Gaps 9;
QY 33 DMNTSQEQL-----CQFSKYKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSCATT 88
DB 4 DNGTGQALGLPTTCVYRENFKQLLPVYSVAVLAAGLPNCVITQICTSRALTRTAV 63
QY 89 YLVNLMVADLLVYL-LPFLIITYSLDDRWPFGEELCKLVHFLFYINLYGSILLITCISVH 147
DB 64 YTLNLALADLLVACSLPLLIYNYAOGDHWPFDFACRLVRFYANLHGSILFLTCISQ 123
QY 148 QFLGVCHPLCSIPYR-TRRHAWLGTSTTWALVQLLPTLAFSHDTYINGQMIWDMTSQ 206
DB 124 RYLIGICHPLAPWHKRGRRRAAWLVCVAVWLAVTTQCLPTAIPAAATGIQRNRTVCYDLSP 183
QY 207 ENFDRLEFAYGIVLTLSGFL-----SLIHGFLVFTDQSPDQARGEPHEDRQHSQVHPD 262
DB 184 ALATHMPYGMALTVIGFLLPFAALLACVCLLAC-----RLCRQDGPAPVAQ 231
QY 263 HPTGVWPLHPLFCALPYHSLLLPHLL-SAFSGLPALDGSQGLQDMSEASGECEQLPOP- 320
DB 232 ERRGKAARMVAVVAFAFSLFPFHITKTAYLAVRSTPGVPCV--LEAFAAAAYKGRPF 289
QY 321 -----SPVLSF-----KGGKRVRLLOKL 339
DB 290 ASANSVLDPILFYFTQKFRFRPHELLQKL 319
RESULT 14
AAP35417 PRELIMINARY; PRT; 328 AA.
ID AAP35417
AC AAP35417;
DT 02-MAR-2004 (TrEMBLrel. 27, Created)
DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
DT 02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
DE Pyrimidineric receptor P2Y, G-protein coupled, 6.
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Kalline N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S., Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y., Phelan M., Farmer A.
RA "Cloning of human full-length CDSs in BD Creator (TM) System Donor vector."
RL Submitted (MAY-2003) to the EMBL/GenBank/DBJ databases.
RL EMBL; BT006771; AAP35417.1; -;
KW Receptor.
SQ SEQUENCE 328 AA; 36429 MW; AAD6C55A43818107 CRC64;
Query Match 20.0%; Score 387.5; DB 2; Length 328;
Best Local Similarity 32.7%; Pred. No. 1.5e-20;
Matches 108; Conservative 42; Mismatches 143; Indels 37; Gaps 9;
QY 33 DMNTSQEQL-----CQFSKYKQVLSLAYSIIFILGLPLNGTVLWHSWGQTKRWSCATT 88
DB 4 DNGTGQALGLPTTCVYRENFKQLLPVYSVAVLAAGLPNCVITQICTSRALTRTAV 63
QY 89 YLVNLMVADLLVYL-LPFLIITYSLDDRWPFGEELCKLVHFLFYINLYGSILLITCISVH 147
DB 64 YTLNLALADLLVACSLPLLIYNYAOGDHWPFDFACRLVRFYANLHGSILFLTCISQ 123
QY 148 QFLGVCHPLCSIPYR-TRRHAWLGTSTTWALVQLLPTLAFSHDTYINGQMIWDMTSQ 206
DB 124 RYLIGICHPLAPWHKRGRRRAAWLVCVAVWLAVTTQCLPTAIPAAATGIQRNRTVCYDLSP 183

QY 207 ENFDRLEAYGIVLTISGFL-----SLIHFGVLFTDQBPQDARGPHEDRQHSPOVHPD 262
 Db 184 ALATHMPYGMALTWIGFLLPAAILLACYLLAC-----RLCRQDGAEPVQAQ 231
 QY 263 HPTGVWFLHPLFCALPYHSLLLPHLLH-SAFSGLPALDQSGQLDMRASECEBOLPOP- 320
 Db 232 ERGKAARMVAVVAAFAISLFFPHITKATYLAVERSTPGVPCVTV-LEAFAAAVKGTRFF 289
 QY 321 -----SPVLSF-----KGGKNEVRLLQKL 339
 Db 290 ASANSVLDPILFYFTQKKPRRPHELLQKL 319
 RESULT 15
 P2Y2 HUMAN
 ID P2Y2 HUMAN STANDARD; PRT; 377 AA.
 AC P41231; Q96EM8;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 28-FEB-2003 (Rel. 41, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE P2Y purinoceptor 2 (P2Y2) (P2U purinoceptor 1) (P2U1) (ATP receptor)
 DE (Purinoceptor)
 GN Name-P2RY2; Synonyms-P2RU1;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Airway epithelium;
 RX MEDLINE=94111846; PubMed=8159738;
 RA Parr C.E., Sullivan D.M., Paradiso A.M., Lazarowski E.R., Burch L.H.,
 RA Olsen J.C., Erb L., Weisman G.A., Boucher R.C., Turner J.T.;
 RT "Cloning and expression of a human P2U nucleotide receptor, a target
 RT for cystic fibrosis pharmacotherapy.";
 RL Proc. Natl. Acad. Sci. U.S.A. 91:3275-3279(1994).
 RN [2]
 RP REVISIONS.
 RX MEDLINE=95108098; PubMed=7809171;
 RA Parr C.E., Sullivan D.M., Paradiso A.M., Lazarowski E.R., Burch L.H.,
 RA Olsen J.C., Erb L., Weisman G.A., Boucher R.C., Turner J.T.;
 RT "Cloning and expression of a human P2U nucleotide receptor, a target
 RT for cystic fibrosis pharmacotherapy.";
 RL Proc. Natl. Acad. Sci. U.S.A. 91:13067-13067(1994).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Placenta;
 RA Fuhr H.L. III, Ikeda S.R., Aronstam R.S.;
 RT "cDNA clones of human proteins involved in signal transduction
 RT sequenced by the Guthrie cDNA resource center (www.cdna.org).";
 RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
 RN [4]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Kidney, and Leukocyte;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins P.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marushina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Usdin T.B., Toshiyuki S., Cairnci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettaman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human

RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 CC -!- FUNCTION: Receptor for ATP and UTP coupled to G-proteins that
 CC activate a phosphatidylinositol-calcium second messenger system.
 CC The affinity range is UTP > ATP > ATP-gamma-S >> 2-methylthio-ATP
 CC = ADP.
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
 CC -!- TISSUE SPECIFICITY: Spleen, testis, kidney, liver, lung, heart and
 CC brain.
 CC -!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
 CC
 CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 CC EMBL; U07225; AAC04923.1; -;
 CC EMBL; AY136753; AA01279.1; -;
 CC EMBL; BC012104; AAH12104.1; -;
 CC EMBL; BC028135; AAH28135.1; -;
 CC HSP; P34996; IDDO.
 CC Genew; HGNC:8541; P2RY2.
 CC MIM; 600041; -;
 CC GO; GO:0005887; C:integral to plasma membrane; TAS.
 CC GO; GO:0004872; F:receptor activity; TAS.
 CC GO; GO:0006873; P:cell ion homeostasis; TAS.
 CC GO; GO:0007200; P:G-protein signaling, coupled to IP3 second . . . ; TAS.
 CC InterPro; IPR000276; GPCR_Rhodopsn.
 CC InterPro; IPR000356; P2U_Purinoceptor.
 CC InterPro; IPR002286; P2_Purinoceptor.
 CC Pfam; PF00001; 7tm.1; 1.
 CC PRINTS; PR00237; GPCR_Rhodopsn.
 CC PROSITE; PS00237; G PROTEIN RECP F1_1; 1.
 CC PROSITE; PS00262; G PROTEIN RECP F1_2; 1.
 CC G-protein coupled receptor; Glycoprotein; Transmembrane.
 CC DOMAIN 1 32 Extracellular (Potential).
 CC TRANSMEM 33 59 1 (Potential).
 CC DOMAIN 60 70 Cytoplasmic (Potential).
 CC TRANSMEM 71 93 2 (Potential).
 CC DOMAIN 94 110 Extracellular (Potential).
 CC TRANSMEM 111 129 3 (Potential).
 CC DOMAIN 130 152 Cytoplasmic (Potential).
 CC TRANSMEM 153 172 4 (Potential).
 CC DOMAIN 173 194 Extracellular (Potential).
 CC TRANSMEM 195 220 5 (Potential).
 CC DOMAIN 221 246 Cytoplasmic (Potential).
 CC TRANSMEM 247 269 6 (Potential).
 CC DOMAIN 270 287 Extracellular (Potential).
 CC TRANSMEM 288 309 7 (Potential).
 CC DOMAIN 310 377 Cytoplasmic (Potential).
 CC CARBOHYD 9 9 N-linked (GlcNAc. . .) (Potential).
 CC DISULFID 13 13 N-linked (GlcNAc. . .) (Potential).
 CC CONFLICT 106 183 By similarity.
 CC CONFLICT 312 312 R -> S (in Ref. 4; AAH12104).
 CC CONFLICT 350 350 E -> G (in Ref. 1).
 CC CONFLICT 359 359 S -> F (in Ref. 1).
 CC SEQUENCE 377 AA; 42289 MW; EE557A857A269AC6 CRC64;
 Query Match 20.0%; Score 387.5; DB 1; Length 377;
 Best Local Similarity 32.7%; Pred. No. 1.8e-20;
 Matches 117; Conservative 41; Mismatches 119; Indels 81; Gaps 13;
 QY 43 CPSEKVKQVLSLAYSIIFILGLPLNGTVLHWSGQTKRWSCATTYLVNLMVADLYVL 102
 Db 25 CRNEDEPKYVLLPVSGVGVVGLCLNVALYIFLCRLKTNASTYTHFLAVSDALYAA 84
 QY 103 -LPFLITYSLDRWPFGLLCKLHFLFYINLYGSILLTCTISVHQFVGCHVPLCSLPY 161
 Db 85 SLPLVYVYARGDHPFSTVLCKLRFVLTNYLCISILFCTISVHRCGLGVLPLSLRW 144

```

QY 162 RRRHAWLGTSTWALVVLQLLPTLAFSHTDYINGOMIWDYDWTQENFDRLPAYGIVLTL 221
Db 145 GEARYARRVAGAVWVLVLAQAPVLYFVTTGARGGRVTCHTSAPLEPSRFVAYSSVM-- 202
QY 222 SGFLSLLGHFGVLF-----TDGOEPDQARGEPHEDRQHSFQVHP 261
Db 203 ---LGLL--FAVFFAVILVCYVLMARRLLKPAYGTSG-----GLPRAKESVRT---- 246
QY 262 DHPTGVWPLHPLF--CALPYH-----SLLLPHLLSAFS-----GLPALDGSOCG 304
Db 247 -----IAVVLAVFALCFLLPFHVTRTLYYSFRSLDLSCHTLNAINWAYKVTRPLASANS- 300
QY 305 LODMEASGECEQLPQPSVLSFKGKNRVRLLQKLQNKLGHPA--GRKCPGLNRS 360
Db 301 -----LDPVLYFLAQQLVRFPARDAKP-PTGSPATPARREL-GLRRS 341

```

Search completed: November 4, 2004, 17:01:16
Job time : 194 secs

This Page Blank (uspto)